

Annual Compliance Plan 2011–2012

Detailing the planned and proactive
environment and natural resource priorities
for the Department of Environment and Resource
Management

July 2011

Prepared by:

Compliance & Investigations

Department of Environment and Resource Management

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July 2011

Foreword

The Department of Environment and Resource Management (DERM) conserves, protects and manages the state's environment and natural resources for today and for future generations. To achieve this goal, DERM is working with Queenslanders to ensure they meet their legal obligations to protect the environment.

DERM achieves this through a range of strategies that encourage, motivate and equip Queenslanders to use and manage natural resources in a sustainable way, and by responding appropriately when breaches of legislation occur.

Annual compliance plans inform Queenslanders of DERM's planned and proactive activities over the coming year. These activities focus on the key issues threatening the natural and cultural environment. The plans allow DERM to carry out their compliance activities in a clear and transparent way.

The Annual Compliance Plan 2011–2012 includes wetlands, place names, surveying and water resource management. It also highlights considerable changes in the way DERM administers the management of waste and energy resource activities, with the introduction of new legislative and compliance programs specific to these areas. In addition to the legislative responsibilities currently administered by DERM, there are significant new responsibilities associated with environmental recovery following the floods and cyclones that affected a large part of the state.

The publication of this annual compliance plan, describing proactive and planned activities and compliance projects, provides an opportunity for companies and individuals to improve their environmental performance, as well as helping deliver the vision of a green, strong and sustainable Queensland.

Terry Wall

Acting Director-General

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Introduction

Regulatory coverage

The Department of Environment and Resource Management (DERM) is responsible for administering a range of legislation, focused on conserving the environment and managing natural resources for the benefit of all Queenslanders. DERM's key areas of regulatory responsibility are:

- **Conserving and enhancing the state's natural environment and ecosystems and conserving Queensland's cultural heritage**—pollution control and waste management, managing vegetation loss and the state's coastline, conserving ecosystems, landscapes and native wildlife, and conserving Indigenous and built heritage.
- **managing land resources wisely**—effective planning and development, State land and stock route management, recognition, and the selling of quarry materials and forest products from State land.
- **securing safe and reliable water for Queensland's future**—managing resource use, protecting unspoiled rivers and maintaining sufficient flow for healthy ecosystems, monitoring surface and groundwater levels and quality, and providing safe and reliable water supplies.

Regulatory compliance program

DERM's regulatory compliance program is founded on a targeted and transparent approach, supported by a modern and strong enforcement program. DERM's approach is to:

- ensure Queenslanders understand their environmental and natural resource management obligations
- encourage voluntary compliance with those obligations
- work with government, business, industry and the community to improve performance
- monitor compliance with Queensland's environmental and natural resource management obligations
- evaluate and continuously improve the way compliance responsibilities are undertaken and delivered
- have a defensible, science-based foundation for decision making
- take consistent and proportionate responses to non-compliance, in accordance with the Enforcement Guidelines, to achieve environmental and natural resource outcomes and deter further non-compliance.

A key output of the regulatory compliance program is the publication of an overarching compliance strategy and annual compliance plans. DERM's Compliance Strategy 2010–14 conveys the principles and strategies to ensure that the compliance program delivers on the department's objectives, whilst the annual compliance plan is prepared to inform the Queensland community of the proactive and planned compliance activities which will be undertaken by the department in the coming year. This allows the greatest risks to Queensland's environment and natural resources to be proactively addressed. The intention of these documents is enabling participation and information exchange and helping build capacity for compliance, by transparently outlining all the proactive and planned priorities for each year. This document outlines DERM's strategic compliance priorities but it does not represent all compliance activity undertaken, or expected to be undertaken, in 2011–2012.

DERM's Compliance Strategy 2010–14, annual compliance plans and the Enforcement Guidelines (which set out how DERM considers matters for enforcement), are available at <www.derm.qld.gov.au>.

Compliance activity

Types of compliance activity

The two main types of compliance activity that DERM carries out to ensure risks are being managed appropriately are outlined below:

1. DERM **responds** to reports about incidents affecting the environment and natural resources. These reports can come from members of the public, industry self-reporting or monitoring programs. This responsive work drives remedial and/or enforcement action on a site-by-site, or a case-by-case basis.
2. DERM **plans** a variety of compliance activities throughout the year aimed at addressing risks before they become problems, many of which would be irreversible. Activities include:

- a. **Strategic response to non-compliance**

These projects target issues requiring immediate attention because they are threatening the safety of people, or the environments and natural resources that DERM protects and manages. These projects drive compliance outcomes and remedial action.

- b. **Strategic response to compliance risks**

These projects target a particular business or community sector or area with a high potential to impact on the natural environment or the safety of people. They focus on issues such as establishing baseline compliance performance, the effectiveness of current regulatory frameworks, strategies to improve compliance performance and identifying best practice. These projects drive improved regulatory systems and tools, and compliance outcomes.

- c. **Ongoing compliance monitoring and assistance to clients, ensuring they adhere to legislation, permit conditions and other regulatory instruments.**

- d. **Capacity building**

These projects provide clients with training, resources and opportunities to increase skills and the capacity for meeting their regulated obligations, and improve the way they operate so that they can move 'beyond compliance' to best-practice approaches to land, resource, and heritage management.

Responding to non-compliance: investigations and prosecutions

The DERM is responsible for the administration of a suite of legislation intended to conserve the environment and sustainably manage Queensland's natural resources. Consequently, DERM undertakes a range of proactive and planned activities (such as licensing, permitting, monitoring, education and communication activities) to regulate industries and activities with the potential to impact upon the environmental or resource condition, and to communicate to the regulated community what their obligations are and how these can be met. In addition to encouraging, facilitating and fostering compliance, DERM is also obligated to respond appropriately where non-compliance is suspected or detected.

The principal focus of DERM's enforcement efforts for the 2010–2011 period was on the non-compliance of industries it regulates. A number of significant investigations have been conducted into companies involved with the coal seam gas (CSG) and underground coal gasification (UCG) industries; waste disposal and re-use industries; and the actions of companies that have caused serious environmental harm.

Investigations have also focused on compliance by individuals with legislation. A significant investigation was conducted into allegations of breaches of the Nature Conservation (Wildlife Management) Regulation 2006 and the *Recreation Areas Management Act 2006* relating to human–wildlife interactions, and specifically those pertaining to the feeding of dingoes on Fraser Island. The investigation resulted in the successful prosecution of a number of individuals, demonstrating the seriousness with which DERM treats conduct that has the potential to undermine its dingo management strategy for the island.

Vegetation management investigations in Central West Queensland have also resulted in the prosecution of a number of landholders who unlawfully cleared vegetation, with considerable penalties imposed by the courts acting as a deterrent to others. DERM's efforts in this area contribute to ensuring that sustainable levels of protected vegetation exist throughout the state.

One of the successes for 2010–2011, were findings that Aboriginal and Torres Strait Islander land trusts, who hold large areas of freehold land throughout Queensland, have increased their compliance rate with the legislation to 53 per cent (39 out of 71 land trusts) for the 2009–2010 financial year. Prior to the commencement of the project in 2008, only one per cent of land trusts were compliant.

In line with its enforcement guidelines, DERM prosecutes those who:

- repeatedly do not comply with regulatory requirements
- seriously breach those requirements
- wilfully choose not to comply with their legislated obligations.

For example, in late 2010 DERM finalised the prosecution of a waste disposal company that had unlawfully received and dealt with highly toxic polychlorinated biphenyl waste. In addition to the unlawful conduct, the company had also submitted false waste transport certificates to DERM to cover up the offences, and also breached an Environmental Protection Order. Two company directors were also prosecuted for their involvement in the offences. In light of the deliberate nature of the behaviour, as well as the commercial motivation behind it, the Brisbane District Court ordered the defendants to pay fines totalling \$290 000.

October 2010 also saw the sentencing of a company, and its managing director, involved in carrying out extensive unauthorised works to a heritage-listed house that it owned. The defendants were aware of the need to obtain heritage approvals, but failed to do so. The Court imposed a fine of \$250 000 against the company and \$100 000 against its managing director. In other circumstances, the fines might have been higher, but the court took into account, amongst other factors, the significant rectification costs required to be paid by the defendants.

In 2011, a greater range of sentencing options were introduced under the *Environmental Protection Act 1994*. This will enable the courts to tailor orders to more effectively achieve the objectives of the legislation. Examples include the ability to order an offender to participate in or carry out a community environmental project, conduct an education program and to publish the details of an offence in a newspaper and/or the offender's annual report. These orders can be imposed instead of, or in addition to, fines and custodial sentences.

Responding to compliance risks: compliance projects

DERM's Compliance Projects team is responsible for managing statewide, complex or strategically important tasks, and works closely with regional staff. In 2010–2011, two significant projects focused on erosion and sediment control, and industrial estates.

Erosion and sediment control

The Erosion and Sediment Control Compliance Project (ESCCP) is a current three-year project (2009–2012), which aims to protect the environmental values of South East Queensland waterways through a targeted inspection program. This project is designed to ensure that legal obligations in the *Environmental Protection Act 1994*, relevant to erosion and sediment control during the construction phase of urban land developments and infrastructure projects, are met.

The inspection phase of the project was implemented across South East Queensland in October 2010. The inspections are conducted applying a 'fair and reasonable' approach based on the fundamentals of education, encouragement and enforcement. A procedural guide was developed to assist DERM and local government officers in assessing the lawfulness of contaminated water releases or sediment build up in waterways downstream of construction sites, as well as clarifying for those involved in urban land development and infrastructure projects the expectations of both DERM and local government regulators.

Early indications are that the site inspections are providing industry with the incentive to develop capacity and implement best practice. However, enforcement action has been taken where operators have repeatedly failed to meet their obligations to minimise sediment run-off. The inspection program will be ongoing until the end of the 2011–2012 financial year.

Industrial estates

DERM published a report on the results of a three-year, statewide industrial estates inspection program. The program characterised estates on the basis of actual and perceived environmental impact by assessing compliance with the *Environmental Protection Act 1994*, and the immediate risks associated with the operation of licensed industries within estates.

Across 57 industrial estates in Queensland, 3261 sites administered by DERM and local government were inspected. As a result of the inspections, 33 statutory actions and 328 written warnings were issued, with the majority of compliance issues related to insufficient stormwater controls, ineffective bunding of chemical storage areas, and general housekeeping issues.

Only eight of the 3261 sites (0.25 per cent) were assessed as high or very high risk, demonstrating that only a small proportion of the industrial estates pose a high or very high risk to the environment.

Annual Compliance Plan 2011–2012

The Annual Compliance Plan 2011–2012 sets out DERM's compliance approach in each of the following areas:

1. flood and Cyclone Yasi environmental recovery
2. Indigenous heritage conservation
3. Queensland heritage conservation
4. surveying
5. place names
6. land management: State land management, stock route network, land trusts
7. quarry management
8. commercial native forests
9. vegetation management
10. estate management: marine and terrestrial parks and forests
11. wildlife management
12. coastal and inland waters: coastal protection, soil protection, wetlands, Great Barrier Reef protection
13. water use and supply
14. National Framework for Compliance and Enforcement Systems for Water Resource Management
15. environmental management
16. waste reform
17. energy resources: minerals and mining, coal seam gas and liquefied natural gas, underground coal gasification.

For each of these areas, this plan provides a brief overview of the priorities and planned activities and projects to be undertaken in 2011–2012. Compliance projects for this period focus upon:

- heritage maintenance compliance
- vegetation clearing identification, prioritisation, education and enforcement
- fodder harvesting and regrowth clearing
- arson in protected areas
- vehicle use in protected areas
- turtle and dugong management in Queensland (State) marine parks
- coastal planning
- erosion and sediment control
- acid sulfate soil management
- reef protection
- water metering compliance
- Port of Townsville material handling
- landfill gas migration
- environmental management practice, performance and compliance review
- environmentally relevant activities in South East Queensland
- mine water management
- mining rehabilitation (financial assurance)
- petroleum and gas environmental performance: coal seam gas, liquefied natural gas, underground coal gasification.

1. Flood and Cyclone Yasi: environmental recovery



Queensland's severe weather over the 2010–2011 summer caused widespread environmental damage. The Queensland Reconstruction Authority is leading the statewide rebuilding program and DERM has been tasked with coordinating Queensland's environmental recovery.

The December 2010 to January 2011 floods, and Tropical Cyclone Yasi, have resulted in significant social, economic and environmental damage across over 99 per cent of Queensland. Reconstruction is now one of Queensland's highest priorities. DERM has responded to the urgency of the reconstruction effort in many ways, including the initiation of a new unit, the Environmental Recovery Coordination Unit (ERCU). ERCU will coordinate DERM's response to the recovery effort.

In particular, DERM will focus on one of six 'lines of reconstruction' outlined in Operation Queensland—The State Community, Economic and Environmental Recovery and Reconstruction Plan 2011–2013 (the new state plan), the Environmental Line of Reconstruction. This document is available at www.qldreconstruction.org.au/state-plan.

Reconstruction will occur over the coming 36 months, endeavouring to recover, conserve and build resistance in disaster-affected terrestrial, aquatic and marine ecosystems, and natural resources across the state. Reconstruction activities have been identified under nine categories: water and sewerage infrastructure, mining and industry, marine health, wildlife, riparian ecosystems, protected areas, landscapes, waste and contamination management, and cross-line of reconstruction environmental activities. These activities are being undertaken to conserve, protect and maintain Queensland's disaster-affected natural resources in the long-term.

DERM's work under the reconstruction plan will contribute to its compliance program through environmental assessment activities. These activities will audit, measure and respond to damage and degradation as well as help the regulated community restore the integrity of their operations, so that their activities can resume and meet environmental obligations.

Reconstruction and environmental assessment activities

- **Water and sewerage infrastructure**—ensuring all gauging stations, water treatment facilities and supply systems are repaired and restored to full operations.
- **Coal seam gas and mining industries**—ensuring the CSG and mining industries' waste water disposal needs are met and are consistent with environmental standards.
- **Marine biodiversity**—monitoring flood plumes in the Great Barrier Reef catchments and the Moreton Bay and Great Sandy marine parks to gauge environmental effects, and identify any likely longer-term impacts on species.
- **Waste and contaminated land management**—working with the waste industry and other partners on the timely clean-up and disposal of waste.
- **Protected areas**—re-opening national parks that closed due to severe weather, and reinstating park infrastructure and visitor facilities.

The majority of environmental line of reconstruction activities will be delivered by DERM in partnership with local governments, the community, industry, non-government organisations and other agencies.

Consequently, and even where not expressly stated, reconstruction and recovery activities will be priorities for all areas within DERM. These proactive and planned activities will ensure that DERM fulfils its obligations as caretakers and regulators of natural resources and the environment, and will ensure the integrity of infrastructure and industries after these extreme weather events.

2. Indigenous heritage conservation



Aboriginal and Torres Strait Islander cultural heritage in Queensland is protected by provisions of the *Aboriginal Cultural Heritage Act 2003* and *Torres Strait Islander Cultural Heritage Act 2003*. Cultural heritage includes both the physical traces of people’s activities, such as campsites and ceremonial sites, as well as more intangible areas, such as story places. Cultural heritage is easily destroyed by both natural and human impacts.

It is the responsibility of all Queenslanders to avoid harming Aboriginal and Torres Strait Islander cultural heritage. Anyone undertaking an activity, irrespective of the underlying land tenure, must take all reasonable and practical measures to avoid harming Indigenous cultural heritage (known as the ‘duty of care’). DERM’s duty of care guidelines are available at www.derm.qld.gov.au/cultural_heritage/legislation/ and should be consulted prior to undertaking a land-use activity.

DERM is able to provide information on previously recorded sites, but people undertaking land-use activities should also consult with the relevant and recognised Aboriginal or Torres Strait Islander party for the area prior to undertaking any activities.

A range of penalties apply in relation to the protection of Aboriginal and Torres Strait Islander cultural heritage.



Proactive compliance activities

- Finalisation of the review of the Indigenous cultural heritage Acts and the introduction of amendments to improve the efficiency and efficacy of the operation of the Acts.
- Education workshops to be carried out, where possible, for Traditional Owners, other government agencies, proponents and local governments.
- Working with individuals undertaking intensive land-use activity to improve operational procedures to better protect cultural heritage.
- Investigate the extent of compliance with the cultural heritage duty of care in the residential development sector.

Further information—*Aboriginal Cultural Heritage Act 2003*, *Torres Strait Islander Cultural Heritage Act 2003*, Duty of Care Guideline.

3. Queensland heritage conservation



Heritage places provide an important sense of place and identity, and help define what it means to be a Queenslanders. Heritage places include buildings and structures, cemeteries, archaeological sites, gardens, urban precincts and cultural landscapes.

Development involving a place on the Queensland Heritage Register must minimise the impact on the heritage values of the place, although changes designed to give a heritage place new life can often be accommodated and are regularly encouraged. Development work to heritage-listed places must first be approved by DERM with either an exemption certificate or development permit. Unauthorised works and failure to maintain heritage places is of particular concern to DERM.

Proactive compliance activities

- Provide information and advice on complying with development conditions and essential maintenance obligations, as requested.
- Work with individuals undertaking development on heritage places to ensure the cultural heritage significance of the place is retained.

Compliance projects

Project	Goal	Objectives	Scope	Expected outcomes
Approved development and essential maintenance compliance.	To protect the cultural heritage significance of places on the Queensland Heritage Register.	To ensure essential maintenance obligations are met. To ensure development conditions are observed and met.	Continued focus on the identification of heritage places 'at risk' due to lack of essential maintenance. Heritage places across the state for which there are recently issued notices or permits will be monitored and inspected as required.	Improved percentage of clients meeting their compliance obligations.

Further information—*Queensland Heritage Act 1992*, Queensland Heritage Strategy 2009.

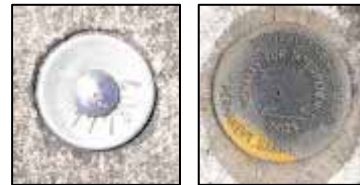
4. Surveying



There is a two-tiered approach to regulating surveying in Queensland. First, the Surveyors Board of Queensland (the board) established by the *Surveyors Act 2003* manages a scheme of professional registration for surveyors. The board upholds professional standards and may investigate and take disciplinary action against registrants whose conduct does not meet those standards.

Second, DERM administers the *Survey and Mapping Infrastructure Act 2003* (SMI Act), which provides for the State to establish, develop and maintain survey and mapping infrastructure, including managing information about cadastral boundaries, administrative boundaries, and permanent marks. The SMI Act details the implications of interfering with survey marks.

DERM makes standards and guidelines for carrying out surveys so that they achieve acceptable survey quality, and specifies the obligations of persons carrying out surveys. DERM also manages a plan auditing process whereby all plans that will be registered are assessed for compliance with the SMI Act and other requirements for registration under either the *Land Act 1994* or the *Land Title Act 1994*.

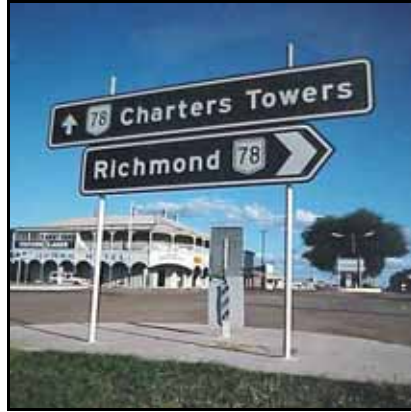


Proactive compliance activities

- Continue existing plan auditing activities during which all plans are assessed for compliance with the SMI Act, the regulations and standards made under the Act.
- Information program to increase public awareness of the importance of avoiding any interference with survey marks.

Further information—*Survey and Mapping Infrastructure Act 2003*, *Survey and Mapping Infrastructure Regulation 2004*, *Standards and Guidelines under the Survey and Mapping Infrastructure Act 2003*.

5. Place names



The *Place Names Act 1994* provides the formal framework in Queensland for naming places, including geographical features (such as mountains, creeks, beaches and islands) and administrative areas (such as localities and suburbs).

As in other Australian jurisdictions, administration of this legislation involves striving for a balance between local community input in naming places and broader considerations, such as the efficient delivery of emergency services and agreed national principles.

The use of approved place names is critical to ensure that emergency services respond quickly, even when a service has been despatched remotely.

DERM provides a range of web-based information, search and data download services to assist in understanding and using place names. It has an ongoing commitment to improving community access to place name information.

Proactive compliance activities

- Review the content of the place names database and improve access to place names information.
- Review the distribution of place names information through DERM to other organisations and continue working with those organisations to promote the appropriate use of approved place names.
- Develop a systematic approach to compliance activity and establish priorities for further action.

Further information—*Place Names Act 1994*.

6. Land management



6.1 State land management

DERM administers around 71 per cent of all land in Queensland, commonly referred to as State land. State land comprises unallocated State land, land held under leases, reserves including deeds of grant in trust, and all dedicated roads. Over each of these tenure types, secondary tenures, such as subleases, licences and permits, may be issued.

Occupying and using unallocated State land is illegal without the prior authority of DERM. Illegal occupation can manage risks, such as: personal injury or the loss of life or property because of wild fire; coastal erosion; unsafe structures; pollution; and public health and safety issues associated with unplanned development and poor living conditions, such as lack of potable water, sanitation and garbage disposal facilities.

Leases and licences are granted over State land for specific purposes, including pastoral, grazing, agriculture, industry, tourism, sport and development. Permits to occupy can be issued over unallocated State land, a road or reserve for a specific purpose, such as a pump site or for short-term grazing. To protect values on leasehold land, land management agreements may be negotiated with lessees on how values will be protected.

In managing State land, DERM ensures land managers comply with their duty of care, comply with the conditions of use or trustee responsibilities, and collect an appropriate return to the State on behalf of the community for use of the land. The duty of care that applies to rural leasehold land that is leased for agricultural, grazing or pastoral purposes is outlined in the Delbessie Agreement. This agreement takes into account the aspirations of leaseholders, conservation and Indigenous groups, and rural industry. An important component of the Delbessie Agreement is the development of a land management agreement with leaseholders based on assessment of land condition and identification of environmental and cultural values. This process enables information to be provided to, or obtained from, the leaseholders on effective land management practices and as a vehicle for ensuring that lease land and associated values are not being degraded.

Proactive compliance activities

- Promote effective and sustainable land management practices through departmental and industry support services.
- Further develop remote sensing capability to identify long-term condition trend risk properties for audit purposes.
- Annual review of major development leases.
- In association with DERM's debt management program, ensure lessees comply with terms and conditions of leases, particularly rent payments.
- Assist lessees to implement land management agreements, including through self assessments, ten-yearly reviews and audits.
- Develop and publish self-assessment and monitoring guidelines for use by lessees.
- Identify illegal occupation of State land during fire and pest management activities and other inspection opportunities. Progressively deal with illegal occupation throughout Queensland as resources permit.

Further information—*Land Act 1994*, *Land Regulation 1995*, *Delbessie Agreement (State Rural Leasehold Land Strategy)*.

6.2 Stock route network



Stock routes are pathways for travelling stock on roads, reserves and other lands. They provide pastoralists with a means of moving stock ‘on the hoof’ around the state’s main pastoral districts as an alternative to trucking and other contemporary transport methods. Approximately 72 000 kilometres (covering 2.6 million hectares) of Queensland’s road network is declared as stock route. These routes, together with reserves for travelling stock, make up the Queensland Stock Route Network (SRN). There are many facilities for travelling stock use associated with the network, including more than 700 operational stock route water facilities.

Select local governments are required to have a stock route network management plan, which outlines how the local government will manage and administer the SRN in their local government area, including issuing permits to travel and agist stock on the SRN and managing the natural values located on the SRN.

A landowner or stockowner must apply to the relevant local government for a permit to walk (travel permit) or graze (agistment permit) stock on the SRN. Water agreements must be in place where a landholder takes a supply of water from a stock route water facility, or supplies water to a stock route water facility. Water agreements negotiated under previous legislation have been terminated in order to introduce a consistent equitable water agreement framework. Previous agreements must be replaced with new agreements where a landholder continues to take or supply water.

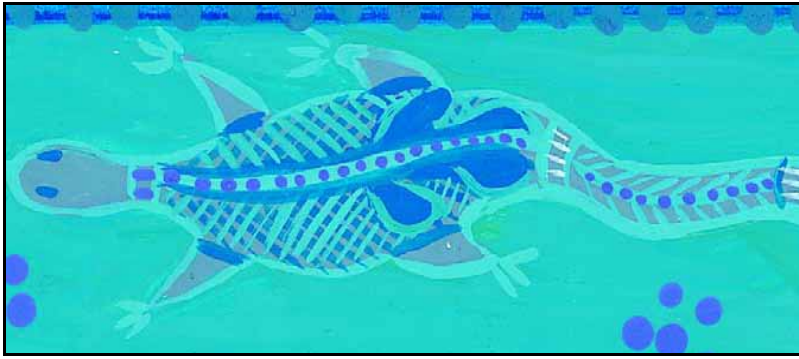
When land that has a stock route crossing is sold, the stock route must not form part of the land that is transferred to the buyer.

Proactive compliance activities

- Review local government stock route network management plans to ensure inclusion of policies to promote compliance.
- As requested by applicants, review local government permitting decisions, for both stock travel and agistment, to ensure permitting decisions are made in accordance with legislative provisions and approved local government policy.
- Help local governments establish water agreements with landholders taking water from, or supplying water to, stock route water facilities.
- Review rural property sales, and inform real estate agents if their listings include stock routes.

Further information—*Land Protection (Pest and Stock Route Management) Act 2002*, Queensland Stock Route Network Management Strategy 2009–2014.

6.3 Land trusts



A land trust is established when land is transferred to Aboriginal or Torres Strait Islander people under the *Aboriginal Land Act 1991* or *Torres Strait Islander Land Act 1991* (the Acts). A land trust is a body corporate established to hold land in trust for the benefit of Aboriginal and Torres Strait Islander people in Queensland who have a particular connection with the land under Aboriginal tradition or Islander custom, or live on or use the land or neighbouring land. There are currently 72 land trusts established under the Acts who collectively hold approximately 1.7 million hectares of land throughout Queensland.

Land trusts are managed by trustees who ensure that they:

- have a constitution by which they function
- have an executive committee with a chairperson and a corporate seal
- maintain appropriate records of decisions and transactions
- hold regular meetings in accordance with the Acts and their constitution
- provide mandatory documentation to the chief executive at the end of each financial year.

A land trust is subject to ordinary local and state government laws relating to development and land taxes; however, land held in a land trust is exempt from general council rates levied by local governments where it is not being used for residential or commercial purposes.

Future amendments to the Acts (expected in August 2011) will provide that no new land trusts will be created, and instead land transferred under the Acts will be held by Aboriginal or Torres Strait Island corporations under the *Corporations (Aboriginal and Torres Strait Islander) Act 2006* (CATSIA). Under recent amendments to the Acts, a registered native title body corporate (RNTBC) can, in certain cases, become a grantee of the land without becoming a land trust. Existing land trusts will have the option of converting to a corporation under CATSIA after the amendments are introduced; however, it is anticipated that a greater majority of land trusts will remain under the existing Acts.



Proactive compliance activities

- Conducting a yearly campaign to assist land trusts to meet their responsibilities to maintain and provide advice and financial records for DERM.
- Provide governance training and administrative support to land trusts 'on country' to address specific areas of need for the management of their land, through the Land Trust Capacity Development Project.
- Working with land trusts to take corrective action and address non-compliance where it is detected.

Further information—*Aboriginal Land Act 1991* or *Torres Strait Islander Land Act 1991*.

7. Quarry management



Queensland's extractive industry underpins the state's growth by supplying quarry materials for infrastructure development. Most quarry material is used in the building and construction industries and for infrastructure projects, such as roads, railways and dams. Current aggregate use in Queensland averages approximately 11 tonnes per capita and this is expected to rise in time with a corresponding strong demand for continued quarry development across regional Queensland. Queensland extractive industries produced in excess of 50 million tonnes of quarry material annually and approximately 12 per cent of this material is owned by the State. Sales of State-owned quarry materials are administered under a number of pieces of legislation by DERM.

All quarries in Queensland must comply with the requirements of the *Environmental Protection Act 1994* and conform to the associated Code of environmental compliance for certain aspects of extractive and screening activities (ERA 16). This code sets an environmental framework, which all quarries must meet, and sets standards to control all aspects of a quarry's operation, including off-site factors such as vibration, dust and particulate matter movements, water quality, erosion and sediment control.

Proactive compliance activities

- Provide information and advice to facilitate compliance with ERA 16.
- Educate quarry operators about the correct application of sales permit and license conditions.
- Regular monitoring of all sales permit and licence conditions.
- Investigate removals of quarry material not consistent with quarrying regulations.

Further information—*Forestry Act 1959*, the *Water Act 2000*, *Coastal Protection and Management Act 1995*, the *Nature Conservation Act 1992*, *Environmental Protection Act 1994* and Code of environmental compliance for certain aspects of extractive and screening activities (ERA 16).

8. Commercial native forests



DERM manages native forest timber production and the sale of quarry materials from State forests, timber reserves and other State-controlled lands across Queensland, as well as administering permits for apiary sites and stock grazing on designated areas of State forest. DERM's goal is to maximise financial returns to the State from the management of native forest products and quarry materials, within social, environmental and cultural expectations.

While managing the commercial sale of forest products, enhancing access to State-owned quarry resources to support infrastructure development projects, and improving the efficiency of commercial management of State-owned forest resources, DERM also ensures all native forest and quarry activities on State lands comply with relevant environmental legislation and applicable codes of practice. DERM regularly monitors timber production activities and provides constructive feedback to harvesting contractors to improve overall environmental performance. Compliance monitoring will focus on activities that have the potential to cause soil erosion and damage to forest roads and tracks.

Proactive compliance activities

- Educate contractors about the correct application of sales permit terms and conditions and codes of practice, including introducing koala identification training.
- Regular monitoring of all sales activities in relation to sales permit conditions and codes of practice.
- Investigate removal of forest products and quarry materials not consistent with the regulations.

Further information—*Forestry Act 1959*, Code of practice for native forest timber production on State lands 2007.

9. Vegetation management and protected plants



Regulating the clearing of vegetation, and taking and use of threatened plants, ensures the conservation of biodiversity, maintains ecological processes and ensures clearing does not cause land degradation. In Queensland, this regulation is predominantly achieved through the *Vegetation Management Act 1999* (VMA) and the *Nature Conservation Act 1992* (NCA).

Under the VMA, clearing remnant vegetation identified on a regional ecosystem or remnant map (on freehold land, Indigenous land and State tenures) can only occur if done under a development permit, or if considered exempt development. Exempt activities include routine clearing required to manage existing fence lines, yards, establishing firebreaks and burning off. Clearing requiring a development permit can only occur for certain purposes, including significant projects, to control non-native plants or declared pests, ensuring public safety, necessary infrastructure, fodder harvesting, thinning, clearing of encroachment or extractive industry.

In 2009, the government introduced the new regrowth laws to protect high-value regrowth vegetation and native vegetation alongside waterways in priority Great Barrier Reef catchments. Regulated regrowth vegetation on freehold, Indigenous and leasehold land for agriculture and grazing is also protected. Whilst no permit is required to clear regulated regrowth on these tenures, any clearing must comply with the regrowth code, and landholders need to notify DERM that they intend to clear. On some other State land tenures, the clearing of native woody regrowth may require a development permit.

Under the NCA and the Nature Conservation (Protected Plants) Conservation Plan 2000, a permit is required for the clearing, removal or use of endangered, vulnerable, or near threatened plants. The use of some commercial species is also regulated. This regulation is designed to ensure the long-term survival of individual threatened plant species by regulating when and how these plants can be cleared, removed or used.

Under certain circumstances, clearing or removal of vegetation and protected plants may be offset by the management and protection of another area of ecologically equivalent vegetation, or by translocation of threatened plants into new habitat areas.



Proactive compliance activities

- Use the Statewide Landcover and Trees Study (SLATS) to detect potential unlawful clearing and understand shifting patterns of unlawful clearing.
- Work with, and provide information to, clients (including local governments) to improve their understanding of the vegetation management framework. This includes a continuation of the industry co-delivery implementation program for vegetation management, in partnership with AgForward and the Queensland Farmers' Federation.
- Audit authorised and exempt clearing activities under the *Vegetation Management Act 1999* and the *Nature Conservation Act 1992*.
- Systematic program to monitor compliance with clearing permit conditions under the vegetation management framework and conditions for the taking of protected plants.

- Systematic program to monitor compliance with the scope and conditions of class exemptions approved by the DERM chief executive (under section 41(1)(a)(ii) of the Nature Conservation (Protected Plants) Conservation Plan 2000) for the taking of protected plants in the course of qualifying activities, including activities conducted under legislative authorities in the mining, petroleum and gas, electricity, roads and rail sectors).
- Monitor delivery of offsets for the taking of extinct, vulnerable or not threatened protected plants in accordance with clients' approved offset plans.

Compliance projects

Project	Goal	Objectives	Scope	Expected outcomes
2008–2009 Statewide Landcover and Trees Study (SLATS)—clearing prioritisation.	<p>To identify and prioritise vegetation clearing cases for investigation in a targeted manner.</p> <p>To confirm and prioritise 2008–2009 SLATS vegetation clearing cases that are unexplained (not considered exempt or under permit) to identify very high and high priority clearing.</p>	<p>Review the unexplained clearing identified in the Analysis of Vegetation Clearing Rates in Queensland report (Supplementary report to the SLATS Landcover Change in Queensland 2008–2009 report), prioritising possible unlawful clearing to determine further action.</p>	<p>Unexplained clearing is remotely identified from the 2008–2009 SLATS.</p> <p>Unexplained clearing will be prioritised for further action from very high to very low based on its size and environmental impact.</p>	<p>Prioritisation of unexplained clearing will ensure that investigations are focused on the highest impact clearing events.</p>
Statewide Landcover and Trees Study (SLATS)—clearing enforcement action.	<p>Identify the highest priority unexplained clearing cases from SLATS and progress investigation and potential enforcement action.</p>	<p>To manage vegetation clearing compliance investigations identified remotely through SLATS.</p> <p>As there are thousands of clearing events identified through SLATS annually, the highest priority cases, requiring investigation and enforcement action must be identified as early as possible. This process will promote holistic management of SLATS cases to ensure that proportionate enforcement action is taken in the earliest possible timeframes for the highest priority cases.</p>	<p>All confirmed priority unexplained (not considered exempt or under a permit) clearing events reported in the Analysis of Vegetation Clearing Rates in Queensland report process and rank in order of total priority.</p> <p>This will include the confirmed unexplained clearing from 2007–2008 SLATS and 2008–2009 SLATS.</p> <p>Once ranked in order of total priority, initiate investigation of the highest ranked cases.</p>	<p>All SLATS vegetation clearing cases that remain unexplained after a preliminary analysis are ranked by priority.</p> <p>Highest ranked cases will be investigated.</p> <p>Appropriate enforcement action will be determined and undertaken by the department for finalised investigations. Enforcement actions include discussions with landholders, warning letters, penalty infringement notices, stop work notices, restoration notices, property maps of assessable vegetation, or legal proceedings.</p>

Project	Goal	Objectives	Scope	Expected outcomes
Audit of vegetation clearing within regulated regrowth.	Review clearing events after October 2009 within regulated regrowth vegetation to identify the levels of compliance with the regrowth vegetation amendments to the vegetation management framework.	To identify the level of compliance with the regulated regrowth component of the vegetation management framework. If clearing events identified during the audit are found to be unlawful, proportionate enforcement action will be taken.	Where DERM has been notified of clearing of regulated regrowth, audits will be conducted into the level of compliance with the relevant regrowth code and landholders' experiences implementing the code. Audits will mostly involve office based assessments using remote sensing data and imagery with some field based assessments. The audit will also identify areas where regulated regrowth clearing has occurred without a notification being made.	Identification of the level of compliance clearing with the current regulated regrowth component of the vegetation management framework. If clearing events identified during the audit are found to be unlawful, proportionate enforcement action will be taken.
Audit of vegetation clearing development permits for fodder harvesting.	To determine compliance and performance with current development permits for clearing of native vegetation for fodder harvesting.	Identification of the level of compliance of development permit conditions for fodder harvesting. If clearing events identified during the audit are found to be unlawful, proportionate enforcement action will be taken.	Undertake audits to assess the level of compliance with development permit conditions regarding native vegetation clearing for fodder harvesting. Audits will mostly involve office based assessments using remote sensing data and imagery with some field based assessments.	Identification of the level of compliance with development permit conditions for fodder harvesting. If clearing events identified during the audit are found to be unlawful, proportionate enforcement action will be taken.
Education and awareness for vegetation management compliance.	To promote and enable effective interpretation and implementation of the vegetation management framework.	To increase client awareness and ability to interpret and implement aspects of the vegetation management framework. Implement targeted education to various vegetation management clients.	Website updates and improvements to assist landholders in understanding the vegetation management framework. Through appropriate mediums, publicise information regarding past enforcement action taken by DERM for non-compliance with the vegetation management framework.	Awareness of the vegetation management framework and past enforcement action. Increased opportunity for self-regulation and education.

Further information—*Vegetation Management Act 1999*, *Sustainable Planning Act 2009*, Sustainable Planning Regulation 2009, State Policy for Vegetation Management, Regional Vegetation Management Codes, Regrowth Vegetation Code, Native Forest Practice Code, Vegetation Management Concurrence Agency Policies for Material Change of Use and Reconfiguring a Lot, Queensland Government Environmental Offsets Policy and the Policy for vegetation management offsets.

10. Estate management: marine and terrestrial parks and forests



10.1 Conservation estate management

The principles used to guide the management of conservation estates are to:

- provide, to the greatest possible extent, for the permanent preservation of the area's natural condition and protect the area's cultural resources and values
- present the area's cultural and natural resources and their values
- ensure that the only use of the area is nature-based and ecologically sustainable.

DERM is also protecting more areas as national park to secure Queensland's unique biodiversity, by increasing land for conservation by 50 per cent. This will bring the total land protected in national park estate to 12.9 million hectares. As a result, some State forests and unallocated State land are being converted to protected area and DERM is keen to ensure that commercial users and visitors to these newly created protected areas are aware of their obligations.

The majority of visitors to, and users of, the conservation estate behave in a reasonable and sustainable manner. However, on occasion DERM's Queensland Parks and Wildlife Service (QPWS) deals with non-compliant activities, including inappropriate visitor behaviour, illegal or unsustainable vehicle use, grazing or cattle incursions, green waste and other litter dumping, illegal firewood collection, tree clearing and other boundary incursions, and interference with historic sites.

Proactive compliance activities

- Undertake compliance and education patrols to ensure visitor activities on QPWS-managed estates are legal and appropriate. Focus on camping and vehicle permits, domestic animals, use of fire, entry to restricted areas and the transition to online camping permit bookings.
- Compliance and education patrols to ensure that vehicle and trail bike use on QPWS-managed estates is legal.
- Compliance and education activities to ensure that road maintenance activities near or within the QPWS-managed estate are compliant with all DERM statutes.
- Compliance and education activities to ensure that incursions of land use or activities near the QPWS-managed estate are detected and investigated.
- Compliance and education patrols on Fraser Island to ensure visitor safety near dingoes.
- Compliance and education patrols on Fraser Island to ensure commercial operations are consistent with permit conditions, particularly at iconic sites.
- Compliance program to target commercial tour operators at Natural Bridge (Springbrook NP), Fraser Island (Great Sandy NP) and the Wet Tropics with a focus on ensuring there are no unauthorised operators and that authorised operators are in the right place at the right time and within capacity levels.

Compliance projects

Project	Goal	Objectives	Scope	Expected outcomes
Arson in the QPWS-managed estate.	To protect ecosystems on QPWS-managed estate from damage caused by arson.	To protect life and property from loss caused by arson on QPWS-managed estate. To educate the public, rural communities and park neighbours about the QPWS fire management program.	All protected areas and forests, in partnership with Queensland Fire and Rescue Service. QPWS fire management program implemented.	Alleviate community concern about fire risk arising from protected areas and QPWS-managed estate. Community understanding of, and respect for, QPWS fire management leads to the elimination of arson. Unnecessary land clearing by property owners in response to perceived fire risk is reduced.
Inappropriate vehicle use in Byfield National Park.	To avoid environmental degradation and disturbance to wildlife, and to enhance visitor amenity and safety through eliminating illegal use of vehicles in protected areas. Support the implementation of the new vehicle access arrangements under the Byfield Area Management Plan.	To educate users about requirements for recreational vehicle use in Byfield National Park and ensure they are complied with. To contribute to planning processes to identify appropriate sites for recreational vehicle use in Byfield National Park.	Byfield National Park—undertaken in partnership with Queensland Police and local government, where appropriate.	Reduced occurrence of illegal vehicle use. Reduced occurrence of accidents resulting in personal injury.

Further information—*Nature Conservation Act 1992*, *Nature Conservation (Protected Areas Management) Regulation 2006*, *Recreation Areas Management Act 2006*.

10.2 Nature refuges



In a large state hosting a diverse and vast array of species, ecosystems and significant sites, nature refuges fill an important niche in promoting a community-based landscape approach to conservation. Nature refuges are voluntary agreements between a landholder and the Queensland Government that acknowledge a commitment to manage and preserve land with significant conservation values, while allowing compatible and sustainable land uses to continue.

Nature refuges comprise the second largest expanse of Queensland's protected area estate. With more nature refuges changing hands from one landowner to the next, DERM is committed to ensuring that new landowners are aware of their obligations under these conservation agreements. The investigation of breaches of nature conservation legislation on nature refuges includes breaches by landowners and may include breaches by third parties.

Proactive compliance activities

- Proactively respond to any suspected, reported or identified breaches of nature conservation legislation on nature refuges.
- Systematic education program to advise nature refuge landholders of their responsibilities in ensuring that activities, including those of third parties, are compliant with *Nature Conservation Act 1992* obligations, and investigate any suspected, reported or identified breaches of nature conservation legislation on nature refuges.

Further information—*Nature Conservation Act 1992*, Nature Conservation (Wildlife Management) Regulation 2006, National Code of Practice for the Humane Shooting of Kangaroos and Wallabies for Commercial Purposes 2008.

10.3 State plantation forest management



As part of the Queensland Government's asset sale program, the State-owned timber business conducted by Forestry Plantations Queensland was incorporated into a new company—Forestry Plantations Queensland Pty Ltd (FPQPL). On 30 June 2010, FPQPL was sold to Hancock Queensland Plantations Pty Ltd.

FPQPL was granted a 99-year plantation licence, giving it the rights to manage timber production on State plantation forests. The underlying Crown land was not sold—DERM still owns and protects it under the *Forestry Act 1959*. DERM monitors FPQPL's compliance with the deeds of agreement that were executed as part of the sale. These outline obligations relating to a host of matters, including fire management, road maintenance and signage for public safety.

FPQPL must maintain accreditation under an internationally recognised sustainable forest management system. This ensures that its management strategies continue to meet high standards of environmental care. It must also rehabilitate certain areas that will be converted to a conservation, rather than a commercial, estate tenure.

A condition of the sale was that the public would maintain the same rights of access to State plantation forests that they had before the sale for recreational activities like bushwalking, horse riding and car rallies, and for commercial activities like stock grazing and bee keeping. Arrangements that ensure continuity for these activities are an integral part of the obligations that DERM and FPQPL must meet.

In the first year of the new arrangements, DERM has already received reports from FPQPL outlining how it is meeting its many obligations. DERM will use these reports to regulate FPQPL's activities in future years.

Proactive compliance activities

- Implement and maintain regional joint fire management committees.
- Maintain regular contact between DERM and FPQPL officers, both at the local and the strategic level, to cooperatively address any regulatory issues that arise.
- Develop additional protocols that will protect areas of natural growth forest, woodlands or grasslands and scientific areas or feature protection areas that are next to established plantations or watercourses.
- Work with relevant stakeholders and the public to improve awareness of the new regulatory framework and how these arrangements may affect their activities and processes.

Further information—*Forestry Act 1959*, Australian Forestry Standard AS4708-2007 (AFS).

10.4 Marine park management



Marine parks are established over tidal lands and waters to protect habitats, including mangrove wetlands, seagrass beds, mudflats, sandbanks, beaches, rocky outcrops and fringing reefs. DERM's Queensland Parks and Wildlife Service (QPWS) has a comprehensive program to ensure stakeholders are aware of their compliance obligations. This is achieved through interpretation, awareness, information and education.

QPWS, in conjunction with the Great Barrier Reef Marine Park Authority, focuses on issues including fishing in protected zones, illegal taking of vulnerable marine and terrestrial species, damage to cultural resource or sites, non-permitted tourism operations, littering, and illegal structures and dredging.

Proactive compliance activities

- Patrols during the day or night around problem sites at various locations within the Great Barrier Reef World Heritage Area and State marine parks.
- Systematic program of compliance and education patrols to ensure visitor activities in Moreton Bay Marine Park are legal and appropriate. Focus on responding to increased levels of use, preserving the integrity of green zones, and non-compliance activity at night.

Compliance projects

Project	Goal	Objectives	Scope	Expected outcomes
Management of dugong and turtle populations, particularly within Queensland (State) marine parks	To ensure sustainable populations of dugong and turtle survive within the Queensland (State) marine parks.	To protect populations of dugong and turtle within Queensland (State) marine parks from illegal take, trade, and non-compliance with protection measures including go slow zones. To educate traditional hunters and the public about threats to dugong and turtles in Queensland (State) marine parks.	All Queensland (State) marine parks. In partnership with the Great Barrier Reef Marine Park Authority in joint managed areas.	Sustainable populations of dugong and turtle within Queensland (State) marine parks. Alleviate community concern about the impact of traditional hunting on dugong and turtle. Community understanding of, and respect for sustainable traditional hunting.

Further information—*Marine Parks Act 2004*, *Great Barrier Reef Marine Park Act 1975*, marine park zoning plans.

11. Wildlife management



DERM manages wildlife on conservation estates, such as national parks, as well as interactions between people and protected native wildlife 'off-park'. DERM aims to conserve and protect the wildlife while being responsive to the social and economic needs of the community.

With more than 1500 Queensland species listed as threatened at the state or national level, DERM is enhancing public awareness of threatened species and providing strategic advice on their recovery.

Areas of interest to DERM include wildlife harvesting, damage mitigation, problem wildlife and incident response, enforcement and compliance, and licensing and permits. A major part of DERM's approach is liaison and engagement with key stakeholders, the general community and other parts of government.



Proactive compliance activities

- Inspect commercial macropod harvesters, dealers and processors, monitor permit return data and ensure annual quotas for commercial harvesting of macropods are not exceeded, relevant codes are being complied with, and to highlight 'best practice' wildlife management.
- Implementation of the Crocodile Management Strategy, to enhance community awareness and reduce negative interactions between human and estuarine crocodiles.
- Monitor flying fox roosts near urban areas and fruit growing management practices, to ensure lethal or illegal disturbance of flying fox populations is not occurring.
- Engage with priority local governments to improve flying fox roost management, and reduce negative interactions between humans and flying foxes, through the development and implementation of local government flying fox management plans.
- Proactively respond to reported or identified potential breaches of nature conservation legislation concerning the taking of wildlife from the wild, particularly with respect to threatened species.

- Launch and maintain the Recovery Action Database (RAD), to provide stakeholders with information on priority species for conservation management, their threatening processes, and foster multi-species recovery actions focused on priority species so that regulatory and conservation objectives are achieved.
- Maintain and update DERM web pages on threatened species to enhance community awareness of threatened species and recovery actions and provide publically accessible online resources.
- Promote Threatened Species Week to enhance community awareness of threatened species and recovery actions.
- Targeted compliance activities, including education and awareness raising, regarding unauthorised human interactions (such as feeding or touching) with both indo-pacific humpback and bottle nosed dolphins in South East Queensland, outside locations to which an approved dolphin feeding program applies.
- Education program to advise Nature Refuge landholders of their responsibilities in ensuring that activities, including those of third parties are compliant with *Nature Conservation Act 1992* obligations, and investigate any suspected, reported, or identified breaches of nature conservation legislation on nature refuges.
- Audit a sample of scientific purposes permits for compliance with conditions.
- Systematic program of compliance and education activities to ensure protection of at risk biodiversity in local government managed areas where species are listed as 'presumed extinct', 'endangered' and 'vulnerable'.

Further information—*Nature Conservation Act 1992*, Nature Conservation (Wildlife Management) Regulation 2006, National Code of Practice for the Humane Shooting of Kangaroos and Wallabies for Commercial Purposes 2008.

12. Coastal and inland waters



12.1 Coastal protection and management

More than 80 per cent of Queenslanders live on the coast. The state has the longest and most scenic coastline on Australia's eastern seaboard, with benefits to Queensland's economy and lifestyle. Queensland's coast is also home to many significant environmental features, such as sand dunes, rainforests, beaches and native wildlife. One of the greatest challenges to Queensland's coastal lifestyle and economies is sea-level rise brought about by climate change, as well as pressures associated with rapid population growth.

To protect this coastal asset, the State Coastal Management Plan (first released in 2002) works in conjunction with other regulatory frameworks (such as heritage, water quality, mining and fishing), and operates under the *Sustainable Planning Act 2009*. The coastal plan applies to the coastal zone as indicated by maps that accompany the plan. The plan has two parts: the State Policy for Coastal Management, containing policies and guidance for coastal land managers on managing and maintaining coastal land; and the State Planning Policy for Coastal Protection, for planning and assessment decisions made under the *Sustainable Planning Act 2009*.

The coastal plan focuses on core coastal resource matters, guiding development in coastal hazard areas; the conservation of coastal biodiversity; coastal-dependent development; dredging and reclamation; and public access, scenic amenity and settlement patterns in the coastal zone.

Proactive compliance activities

- Provide training for DERM and local government staff responsible for land-use planning and development assessment in the coastal zone.
- Publish decision support tools (mapping, guidelines, presentations and technical information) to support implementation of the plan.
- Provide planning and technical support to individual DERM staff and local governments to assist them implement policies of the plan.
- Continue the operation and implementation of the Point Source Database to cover sewage treatment plants and industry, to gather monitoring data and check compliance of wastewater discharges to surface water and to land in Queensland.
- Monitor water quality and aquatic ecosystem health of estuarine and marine waters in South East Queensland and selected waterways in collaboration with other organisations to assess the condition and potential impact of sewage treatment plant discharges.
- Continue to expand and enhance decision support systems and databases to receive, assess, and report on monitoring data collected by licence holders in relation to wastewater management and disposal, in particular the Wastewater Tracking and Electronic Reporting System (WaTERS) due for completion at the end of 2011. This system will collect data in relation to environmental water quality monitoring required under development approvals.

Compliance projects

Project	Goal	Objectives	Scope	Expected outcomes
Queensland Coastal Plan (QCP) training program.	To ensure DERM and local government staff are sufficiently informed to effectively enable them to implement the QCP.	DERM and local government staff responsible for implementing the QCP through land use plans and development assessment achieve the intended policy outcomes.	Training of DERM and local government planning and development assessment staff. Publication of decision support tools: <ul style="list-style-type: none"> • QCP • mapping products (coastal zone, coastal management districts (CMD), areas of ecological significance and coastal hazard areas) • coastal hazard area mapping methodology guideline • coastal hazard adaptation planning guidelines (others to be identified in preparation for training program). 	DERM and local government decisions contribute to achievement of QCP policy outcomes.

12.2 Soil protection and sediment control



Development continues to pose a risk to water quality and waterway health, with sediment, contaminants, nutrients and rubbish entering waterways from urban stormwater and wastewater systems. Waterway erosion can also occur through the concentration of stormwater flows entering natural waterways. The Erosion and Sediment Control Compliance Project (ESCCP) has been undertaken to meet DERM's commitment to protect the environmental values of South East Queensland waterways through a targeted inspection program focusing on erosion and sediment control during the construction phase of urban land developments and infrastructure projects. This project aims to ensure that obligations set out in the *Environmental Protection Act 1994* are met.

Developers must also be aware of the State Planning Policy 2/02 – Planning and Managing Development involving Acid Sulfate Soils (SPP 2/02) when developing land in low-lying coastal areas in certain local government areas. Development involving acid sulfate soils (ASS) should be planned and managed to avoid potential adverse effects on the natural and built environment (including infrastructure) and human health. Development permits may include a requirement to prepare and implement an ASS management plan, consistent with the SPP 2/02 Guideline. Additionally, permits under the *Water Act 2000* are required to extract quarry material, such as sand, gravel, rocks and soil, from non-tidal reaches of streams and freshwater natural lakes. Permits are also required to clear vegetation, excavate or place fill within a watercourse, lake or spring.

On 14 April 2011, the then Minister for Environment and Resource Management released the proposed criteria for identifying strategic cropping land (SCL) in Queensland to be used in drafting the new SCL legislation. At that time, the Minister also released a technical assessment report and independent expert review of the proposed criteria. The release of a regulatory assessment statement (RAS) and draft State planning policy (SPP) is the next step in the implementation of the SCL framework. The RAS and draft SPP will be released for public consultation as soon as possible. It is anticipated that the new SCL legislation will be introduced in 2011. The Queensland Government will continue to work with key stakeholders to implement the SCL framework.

Compliance projects

Project	Goal	Objectives	Scope	Expected outcomes
Erosion and sediment control (ESC) 2009–2012	To protect the environmental values of waters and water quality objectives from urban and infrastructure development sites.	<p>To increase monitoring of ESC practices on construction sites in South East Queensland (SEQ) to ensure compliance with the <i>Environmental Protection Act 1994</i>.</p> <p>To build internal capacity of DERM and SEQ local governments for undertaking compliance actions.</p>	<p>SEQ Healthy Waterways Strategy 2007–12 identified urban development as a major contributor of sediment and other pollutants to waterways.</p> <p>Undertaking compliance inspections during construction phase of public infrastructure and private developments in partnership with SEQ local governments.</p>	<p>Significant improvement in ESC practices at construction sites.</p> <p>Significant reduction of sediment from urban and infrastructure development sites entering SEQ waterways.</p>

Project	Goal	Objectives	Scope	Expected outcomes
Acid sulfate soils	Continually improve departmental business processes.	To provide standardised responses for low-risk ASS development applications.	Prepare ASS layers for use to support assessment. Prepare standard responses. Prepare decision support tools. Review and amend DERM ASS checklist and implement new approaches so that information provided can assist in the decision making.	Efficient and consistent departmental advice in relation to ASS.

Further information—*Environmental Protection Act 1994*, Environmental Protection (Water) Policy 2009, *Sustainable Planning Act 2009*, draft State Planning Policy for Healthy Waters, State Planning Policy 2/10 – Planning and Managing Development involving Acid Sulfate Soils, Temporary State Planning Policy 1/11 for Protecting Wetlands of High Ecological Significance in Great Barrier Reef Catchments, *Water Act 2000*.

12.3 Wetlands protection and management



The wetland protection package was first introduced in 2010 to help protect wetlands of high ecological significance in Great Barrier Reef (GBR) catchments from the effects of high impact earthworks. The package is considered necessary to assist in stopping the decline in reef water quality and the loss and degradation of wetlands that are not currently protected by other legislation, such as the *Vegetation Management Act 1999*.

The wetland protection package includes a Temporary State Planning Policy 1/11: Protecting Wetlands of High Ecological Significance in Great Barrier Catchments (SPP) and amendments to the Sustainable Planning Regulation 2009. The changes establish wetland protection areas around significant wetlands in GBR catchments and create assessment triggers under the Sustainable Planning Regulation 2009. In 2011, the SPP was released as a draft for consultation and is expected to be finalised as a permanent SPP in the second half of 2011.

The Temporary State Planning Policy 1/11 for Protecting Wetlands of High Ecological Significance in Great Barrier Reef Catchments seeks to ensure that development in or adjacent to wetlands of high ecological significance in Great Barrier Reef catchments is planned, designed, constructed and operated to prevent the loss or degradation of wetlands and their values, or enhances these values, particularly the hydrological regime and ecological values of those wetlands.



The Queensland Wetlands Program (the program) provides a suite of tools across the wetland management spectrum from policy, through on-ground management, to monitoring covering the entire state. Phase 1 of the program (2003–2009) concentrated on the development of tools to address these different management needs, Phase 2 (2010–2013) has a focus on wetlands tools integration and use in sustainable wetlands management and the implementation of projects, which will increase the uptake and usefulness of the tools.

The program's website (*WetlandInfo*) is the first-stop for wetland management resources and provides access to all tools developed by the program in an integrated manner. The program has supported the development of wetlands mapping for the entire state (base map of 2001) and this has been updated to 2005 and was released in 2010.

Several of the products developed under the program are required to be used in meeting certain requirements of the government's wetlands protection package.

The development of ecological character descriptions for all of the Ramsar wetlands of international significance was completed in 2010. These studies describe the key components and processes of these internationally recognised sites and identify threats and monitoring requirements.

Proactive compliance activities

- Promote and provide advice on the use of wetland management tools available as free downloads through *WetlandInfo*.
- Updated wetlands mapping to 2009 to be released in 2011.
- Information on the rate of loss of wetlands, based on wetlands mapping to be included in the State of the Environment report.
- Continue with the implementation of Phase 2 of the Queensland Wetlands Program in accordance with agreed objectives and timelines.
- Work with clients to improve their understanding of the wetlands protection package and respond to reports of developments that may have been undertaken without necessary approvals.
- Development of agreed procedures for assessing effectiveness of the State planning policy for Great Barrier Reef wetlands.
- Implement the government's decision concerning the proposed permanent State planning policy for wetland protection in Great Barrier Reef catchments.

12.4 Agriculture and the Great Barrier Reef



The *Great Barrier Reef Protection Amendment Act 2009* introduced regulations to improve the quality of water entering the Great Barrier Reef. It applies to sugarcane growing and cattle grazing properties in the Burdekin Dry Tropics, Wet Tropics and Mackay–Whitsunday catchments in North Queensland. The amendments were designed to ensure that farmers adopted management practices that reduced the levels of farm chemicals, fertiliser nutrients and sediment harming the reef. The new legislation is part of the Queensland and Australian governments' Reef Plan and Reef Rescue initiatives and has been developed in partnership with industry to deliver a practical regulation. Since the commencement of the Chapter 4A—Great Barrier Reef Protection Measures—of the *Environmental Protection Act 1994* on 1 January 2010 (reef protection legislation), compliance efforts have focused on providing extensive information, assistance and education to operators about the new legislative requirements. Impacts from severe weather into the regulated catchments have also been taken into account. Compliance actions will continue to deliver assistance to landholders with a stronger emphasis on enforcement actions to address recalcitrant operators or those causing serious environmental harm.

Proactive compliance projects

Project	Goal	Objectives	Scope	Expected outcomes
Reef protection	To reduce the impact of sugar cane growing and cattle grazing activities on the quality of water entering the Great Barrier Reef (reef).	To reduce by at least 50 per cent the amount of nutrients (nitrogen, phosphorus) and pesticides flowing from catchments into the reef lagoon by the end of 2013, and to cut sediment flowing to the reef by 20 per cent by 2020. Maximise the uptake of land management systems and corresponding actions, and a culture of voluntary compliance, consistent with the objectives of reef protection legislation; and a trend toward A Class condition for land, soil and water resources for reef health.	Focus on the regulated catchments of Mackay–Whitsunday, Burdekin Dry Tropics and Wet Tropics catchments. Continue to deliver education and assistance programs to reef protection legislation (in conjunction with industry groups, natural resource management bodies and the Department of Employment, Economic Development and Innovation). Compliance actions take into account external impacts such as severe weather events. Targeted compliance activities, including education, assistance and enforcement actions in relation to recalcitrant operators. Conduct reviews of strict requirements and record-keeping in relation to the application of nutrients (nitrogen and phosphorus) under the <i>Environmental Protection Act 1994</i> and application of prescribed agricultural ERA products under the <i>Chemical Usage (Agricultural and Veterinary) Control Act 1988</i> . Undertake targeted environmental risk management plan (ERMP) audits. Continue research investments to understand motivators and barriers to compliance and beyond compliance, which will inform future compliance strategies. Foster voluntary compliance by rewarding good performance.	Improved understanding of environmental impacts and regulatory environments. Improved uptake of legislative requirements. Identification of trends in relation to specific management practice uptake, informing future compliance and education efforts. Improved skills and knowledge of landholders reflected in good property management systems that minimise impacts to reef water quality.

13. Water use and supply



13.1 Water use

Water is a fundamental and vital resource that underpins the prosperity and wellbeing of all Queenslanders. Regional water supply strategies are the Queensland Government’s approach to ensuring short and long-term regional water supply security. These strategies, developed in partnership with local governments, water service providers, industries and community groups, balance water demand and supply requirements and provide regional water supply solutions for the next 50 years. Water resource plans complement parallel initiatives like regional water supply strategies.

DERM is responsible for planning the state’s future needs by securing supplies for social and economic needs, such as towns, industry, irrigation, mines, fisheries and tourism, while setting out strategies to support river health. Water resource plans, resource operations plans and resource operations licences are DERM’s principal tools for strategically managing water. Water metering provides a clear picture of water-use patterns to enable effective planning, allocation and management of the resource.

Landowners and other entities, such as local governments and water authorities, require authorisation in the form of a water licence, water allocation or water permit to take water from a watercourse, lake or spring; a water licence to take overland flow water in certain areas; a water licence to interfere with water in a watercourse; and in many areas of the state, a water licence or water permit to take underground water. Development permits may also be required to construct works that allow the take of, or interference with, water resources to occur. Taking water unlawfully or interfering with water in a watercourse can jeopardise the ability of other authorised users to enjoy the benefit of the resource, whilst also impacting upon the ecosystems that rely on the water. In the case of underground water, bore drilling can reduce pressure in aquifers, possibly cross-contaminate aquifers and harm nearby ecosystems, so it is important that best practice standards are complied with.

Proactive compliance activities

- Audit water supply scheme operations with a rolling audit plan.
- Respond in a timely manner to all reports of water entitlement overuse, unlawful take of water, or illegal works.
- Ensure subartesian and artesian bores are drilled to the respective best practice standards, compliant with work approvals, and drilling logs are submitted.

Compliance projects

Project	Goal	Objectives	Scope	Expected outcomes
Statewide meter compliance project	To reduce the risk of overuse and degradation of the water resource, such as salt water intrusion.	To ensure landholders operate in accordance with their water use entitlements. To inform clients about meter installations and potential impacts on the resource from overuse.	Landholders within metered areas of the state. Meter readings will be reviewed in accordance with water sharing rules. Landholders will be made aware of potential non-compliance with entitlements. Unlawful take of water may result in regulatory action. Inspections of works exempt from metering, to determine if still appropriate.	Sustainable water resource management through maximised water resource security, meeting environmental flow requirements and preserving aquifer integrity.

Further information—Water Act 2000, water resource plans, minimum standards for the construction and reconditioning of water bores that intersect the sediments of artesian basins in Queensland.

13.2 Water supply



Water supply, sewerage services and water dam safety are regulated under the *Water Supply (Safety and Reliability) Act 2008*.

Service providers (except recycled water providers) must be registered and, where required, must have approved plans (or exemptions) in place to ensure a continuity of the provision of water and sewerage services. However, compliance action is being held in abeyance for some plans pending a decision on a new regulatory framework for urban water and sewerage services.

Owners of referable dams in Queensland are required to ensure that they meet the requirements of the *Water Supply (Safety and Reliability) Act 2008*.

A shortage of suitably qualified people to help meet legislative requirements or timeframes can impact upon the ability of owners of small size referable dams and small and/or remote service providers to meet their obligation.

Introducing new requirements for drinking water and recycled water that require incident and water quality reporting has highlighted difficulties in relation to resource availability and workforce skills and capacity for service providers.

DERM provides information, including regulatory guidelines, to service providers and dam owners to help them comply with their regulatory requirements, and also works individually and collectively with service providers and dam owners to discuss issues and identify ways to improve compliance.

Proactive compliance activities

- Ensure plans received from service providers are reviewed and approved within set timeframes. (Compliance action on some types of outstanding plans is on hold pending a decision on a new regulatory framework proposal for urban water and sewerage services).
- Work with dam owners and key stakeholders to ensure spillway upgrades occur in accordance with the timings approved by DERM.
- Educate, inform and work with drinking water providers to ensure that they:
 - undertake E.coli monitoring at the required frequency and sample numbers
 - report all water quality incidents as required and manage them appropriately.
- Review and approve primary plans that are received from service providers within set timeframes.
- Monitor and work with service providers with an approved recycled water management plan to ensure they are complying with their plans.

Further information—*Water Supply (Safety and Reliability) Act 2008*.

13.3 National Framework for Compliance and Enforcement Systems for Water Resource Management



The National Framework for Compliance and Enforcement Systems for Water Resource Management provides a nationally consistent approach by strengthening compliance and enforcement within each jurisdiction and addressing any gaps in their systems.

Queensland has agreed to use best endeavours to give effect to the principles of the framework. An enhanced and more robust compliance and enforcement approach should:

- ensure public confidence in water resource management through security of access to water to which users are entitled
- increase compliance with water resource legislation in high-risk catchments (reducing the impact of non-compliance on security of environmental flows)
- prevent and respond to illegal activities that threaten to diminish the effectiveness of national efforts to set water use on a sustainable footing.

Queensland’s implementation plan for the framework is predicated on three main drivers:

- the need to **understand** the nature, suspected extent and impact of non-compliance in the use of water resources, and the risk posed to such resources so as to be able to best target subsequent compliance activities
- the need to **develop** a cost-effective, best practice suite of measures (both legislative and administrative) to ensure the maximum flexibility in approach and responsiveness to non-compliance
- the need to **deliver** the range of compliance activities that will be most effective and efficient in achieving the objective of secure access to water and secure environmental flows and ensure public confidence in water resource management.

Queensland’s implementation plan will deliver on the overall goal of implementing the framework over the next five years and ensuring the sustainable management of Queensland’s water resources and public confidence in water management.

Proactive compliance activities

- Providing a detailed understanding of the impact of non-compliance on the sustainable management of water as a resource, and the nature, scope and drivers for such non-compliance.
- Increasing monitoring of water users in high-risk catchments to verify their compliance with the *Water Act 2000* through an increase in the number of compliance officers.
- Reviewing the offences, penalties, and enforcement options available under the *Water Act 2000*, to ensure that they are consistent with the framework.
- Developing and implementing an education strategy aimed at improving water users’ knowledge and understanding of the importance of complying with the *Water Act 2000*.

14. Environmental management



Everyone in the community is responsible for actions that affect the environment. No one may carry out an activity that causes, or is likely to cause, environmental harm unless they take all reasonable and practicable measures to prevent or minimise the harm.

To protect the environment, DERM regulates an extensive range of primary, secondary and tertiary industries under the *Environmental Protection Act 1994*, broadly categorised as mining and petroleum activity (refer to section 17), aquaculture and intensive animal industry, chemical manufacturing, fuel burning, extraction, metal fabrication, non-metal product manufacture, food processing, timber processing, transport and bulk material handling, waste management and water treatment. DERM also maintains registers and regulates contaminated land resulting from poor environmental management and waste disposal practices, or accidental spills in industrial or commercial activities.

Industry that meets certain thresholds, such as fuel use and substance handling, must report emissions and transfers of substances to DERM. This information is publicly available on the National Pollutant Inventory (NPI) internet database <www.npi.gov.au>.

DERM has reviewed and updated Queensland's environmental protection policies for air, noise and water. These revisions include updated schedules of environmental objectives to protect the community and Queensland's environmental values.

In 2011–2012, DERM will begin a compliance program that systematically reviews the environmental management practices and performance for an annual selection of environmentally relevant activities under Schedule 2 of the Environmental Protection Regulation 2008. On development of more contemporary and appropriate management standards and guidance material, DERM will audit sites against these new performance benchmarks and then work with businesses to update permits or licenses in a manner consistent with the provisions of the *Environmental Protection Act 1994*. These industry-focused reviews will ensure continuous improvement by businesses to manage environmental risks, ensure consistency in permits and licenses across the state and, with industry embracement of better environmental management practices, provide for further comfort in streamlining of permit and licensing processes into the future.

As well as proactive and planned activities, DERM also responds to community concerns and reported problems. If a person becomes aware of serious or material environmental harm being caused or threatened by an activity they are involved in, they have a duty to report that harm (unless the harm is authorised by law). Environmental issues can be reported from anywhere in the state through a 24-hour, seven-day-a-week hotline service on 1300 130 372. Examples of incidents and complaints reported to DERM include oil and chemical spills, sewage overflows and fish kills.

Proactive compliance activities

- Carry out general compliance inspections of licensed sites posing the greatest environmental risk. Sectors targeted this year include sewage treatment plants (municipal and small operators), extraction, waste facilities, various processing industries (including composters and extraction activities, meatworks, refineries, metal production, chemical manufacturers and bulk material handling) and mine sites.
- Assess and, where necessary, improve the quality of all submitted NPI reports.
- Provide advice and reviews of scientific assessment of surface water impacts and aquatic ecosystem health in relation to development approvals and related licence amendments.

- Undertake technical assessment and modelling related to land disposal of wastewater from environmentally relevant activities.
- Provide high quality science for assessment and review of wastewater release activities.

Compliance projects

Project	Goal	Objectives	Scope	Expected outcomes
Landfill gas migration 2010–2013	To establish a risk status for sub-surface migration of landfill gas from Queensland landfills.	To identify whether landfill operators are managing landfill gas appropriately. To identify any risks posed to encroaching land uses on landfill facilities.	Complete a desktop study to identify landfill sites within Queensland that are at risk of encroachment by incompatible land uses, prioritising putrescible waste facilities and large facilities in the first instance. Conduct site audits of high risk facilities and complete a review of landfill gas management procedures. Where existing data and inspections do not confirm 'no gas migration', an environmental evaluation of potential gas migration pathways will be required.	Develop a risk profile associated with potential landfill gas migration for Queensland landfill facilities. High risk landfills requiring improved landfill gas management infrastructure and practices commit to, and invest in the necessary improvements.
Port of Townsville material handling	To obtain compliance with current approvals and identify areas for improvement for premises which are potential sources of air contaminants.	To work with the port and relevant port users to promote best practice for materials handling, particularly for bulk mineral concentrates.	Activities conducted within the Townsville port area. Conducting compliance inspections of the port area and bulk materials handling facilities within the port area.	Minimised risk associated with dust.
Environmental management practice, performance, and compliance review.	To facilitate continual improvement in the environmental management practices, performance and compliance of industrial activities regulated under the <i>Environmental Protection Act 1994</i> .	To evaluate and identify priority environmentally relevant activities for an industry targeted environmental management practice, performance, and compliance review. Audit and review industry environmental management practice, performance. Compare ERA category or industry sector environmental management practice, performance, and best practice approaches against current permit conditions.	High priority environmentally relevant activities under Schedule 2 of the Environmental Protection Regulation 2008.	Systematic evaluation of ERAs to develop guidance material for industry, and improve permit and authority conditions to better promote best practice.

Project	Goal	Objectives	Scope	Expected outcomes
South East Queensland (SEQ) environmentally relevant activity (ERA) compliance	To identify suitable candidates for partnership with the ecoBiz program from the highest risk ERAs in SEQ.	To identify the highest risk ERA sites in SEQ and assess them to determine levels of environmental compliance and sustainability for partnership with the ecoBiz program.	Environmentally relevant activities with DERM as the administering authority which are located in South East Queensland 30 highest risk sites identified using the Toxic Equivalency Potential methodology applied to the 2010–2011 National Pollutant Inventory reporting data for both air and water emissions.	High risk sites will be identified. Levels of compliance will be determined through a combination of desktop and on-site inspections Provide the ecoBiz team with details of site(s) that satisfy partnership candidature requirements.

Further information—*Environmental Protection Act 1994*, draft Code of environmental compliance for level 2 petroleum activities.

15. Waste reform



The Queensland Government introduced specific waste management legislation, which commenced on 1 July 2000. The Environmental Protection (Waste Management) Policy 2000 and the Environmental Protection (Waste Management) Regulation 2000 clarify waste management practices in Queensland and provide improved environmental safeguards. Developed in conjunction with local government and industry, the legislation was designed to benefit Queensland communities through safer disposal practices and cost savings from improved planning and management of waste services.

Waste management reform in Queensland faces many challenges, including a growing population, increasing scarcity of suitable landfill sites, a carbon-constrained environment and long transport distances. There are also particular waste streams that are hazardous to the environment or to human health.

To address these challenges, in December 2010 the government introduced Queensland's Waste and Recycling Strategy 2010–2020. The strategy has been introduced in recognition of the need to reduce the increasing production of waste and disposal of valuable and finite resources to landfill. It includes:

- a waste management hierarchy with a focus on avoiding waste production followed by reuse and recycling
- the introduction of a waste levy
- new enforcement and compliance tools, including a public reporting system for littering from vehicles and illegal dumping
- increased funding and support for state and local government, industry and community groups to implement programs to achieve waste management.

Proactive compliance activities

- Carry out general compliance inspections of licensed sites posing the greatest environmental risk. Sectors targeted this year include sewage treatment plants (municipal and small operators) and waste facilities (see section 14).
- Subject to government endorsement, implement a system enabling public reporting of both littering from vehicles and illegal dumping. When these reports meet specific criteria, issue penalty infringement notices to offenders.
- Partner with local governments to identify and clean-up illegal dumping hot spots and to undertake enforcement action.
- Undertake targeted audits and site inspections to determine waste disposal sites' compliance with levy obligations.

16. Energy resources



DERM recognises the importance of ensuring that emerging and established energy industries are managed so that any potential environmental impacts upon agricultural lands, rivers and groundwater supplies are assessed before approvals are given, and that the industries are then regulated effectively during operation.

16.1 Minerals and mining

DERM is responsible for the regulation of the environmental management of the mining industry in Queensland through the provisions of the *Environmental Protection Act 1994* and the Environmental Protection Regulation 2008. The regulatory framework is designed to ensure that Queensland's environment is protected while allowing for ecologically sustainable development.

To protect the environment, DERM regulates an extensive range of primary, secondary and tertiary industries under the *Environmental Protection Act 1994*, broadly categorised as mining and petroleum activities. A mining project is prescribed under section 151 of the *Environmental Protection Act 1994* as either a level 1 mining project or a level 2 mining project, depending on the risk of environmental harm. Mining activities that are part of a mining project are authorised under an environmental authority (mining activities). For a new mining project, an applicant must apply concurrently for an environmental authority (mining activities) under the *Environmental Protection Act 1994* and a mining tenement under the *Mineral Resources Act 1989*.

Proactive compliance activities

- Carry out compliance inspections of mine sites posing the greatest environmental risk.
- Review and implement the water-related model mining conditions for Queensland.

Compliance projects

Project	Goal	Objectives	Scope	Expected outcomes
Mining rehabilitation (financial assurance)	To address any gap between total financial assurance held by the State and the total cost of rehabilitating disturbed land. To prevent financial liability associated with unexpected closure (such as bankruptcy) of mines.	To ensure mining plans of operations accurately reflect disturbed land and financial assurance calculations. To improve tools for DERM staff to accurately assess rehabilitation progress and financial assurance requirements.	Four-year project from August 2008 to 2012. Mining rehabilitation and financial assurance issues at level 1 mining operations across the state. Compliance inspections of a selection of mine sites across Queensland.	Improved accuracy of plans of operations, which disclose rehabilitation works and costs. Adequate financial assurance is held by the State.

Further information—*Environmental Protection Act 1994*, draft Code of environmental compliance for level 2 petroleum activities.

16.2 Coal seam gas and liquefied natural gas industries



The coal seam gas (CSG) to liquefied natural gas (LNG) industry in Queensland is rapidly expanding and DERM is committed to ensuring that the environmental and natural resource impacts of CSG/LNG industries are appropriately managed. In addition to the regulatory framework that DERM has recently implemented to improve the management of impacts from CSG water dams and to manage residual salt, DERM is also developing new laws to require stringent management of water extraction impacts on bores, aquifers and springs. DERM will proactively inspect the CSG, and later the LNG, industries to ensure that protected vegetation is not impacted; that waste products, including CSG water and residual salts, are managed and disposed of correctly; that previously contaminated areas, such as decommissioned evaporation dams, are rehabilitated; and that groundwater is protected from contamination and over extraction. At the LNG development construction phase, the focus will be on sediment control conditions, acid sulphate soil management, and protection of marine values outside the approved construction area.

A robust compliance framework (the CSG/LNG Compliance Plan 2011) has been developed to transparently communicate the government's commitment to ensuring that the environmental and natural resource obligations are met as these industries develop and expand. This framework focuses upon the following key areas of CSG/LNG compliance and regulation:

- Audits and inspections of CSG and LNG operations in terms of:
 - Environmental Authority conditions and *Environmental Protection Act 1994* (EP Act) compliance
 - impacts of groundwater extraction
 - CSG surface water management relating to the discharge and injection of CSG water
 - LNG operations compliance with dredge management plan conditions, tidal works approvals or works within coastal management districts approved under the *Coastal Protection and Management Act 1995* (CPM Act).
- Audits and inspections of CSG Operators in terms of *Water Act 2000* compliance incorporating the monitoring of CSG companies in relation to baseline assessment plans, bore assessments, water sampling methodologies and make good agreements.
- Compliance with new laws recently introduced under the *Water Act 2000* and the *Water Supply (Safety and Reliability) Act 2008* to better protect groundwater resources in CSG extraction areas, and town drinking water supplies receiving treated CSG water.
- Compliance with new laws and conditions imposed by DERM to regulate the use of hydraulic fracturing (fracking) stimulation fluids containing benzene, toluene, ethylbenzene and xylene (BTEX) and the undertaking of proactive inspections for fracking activities.

The government has established an inter-departmental LNG enforcement unit (led by DERM) comprising regionally based multidisciplinary staff responding to landholder concerns regarding environmental, groundwater, gas safety, land access and tenure related issues. In this regard, the unit will work closely with landholders, other stakeholders and CSG/LNG operators alike.

Proactive compliance activities

- Carry out compliance inspections of licensed sites (including environmentally relevant petroleum activities) posing the greatest environmental risk.
- Respond to incident reports received on the DERM hotline.

- Undertake planned inspections to ensure compliance with obligations pertaining to: *Environmental Protection Act 1994* requirements, CSG water management, hydraulic fracturing and beneficial use approvals.
- Implement the groundwater monitoring regime, incorporating the monitoring of 300 bores per calendar year of 2011 and 2012 respectively.
- Strengthen the compliance framework through the development of a complaints management framework, the CSG compliance portal, the compliance indicators and reporting regime, and a framework to encourage industry to go beyond compliance.

A range of commitments, projects and programs pertaining to regulation and compliance associated with CSG/LNG industries are articulated in the CSG/LNG Compliance Plan 2011, which is available on the DERM website <www.derm.qld.gov.au>. The CSG/LNG Compliance Plan 2011 describes the projects and priorities that will be undertaken, and which include those activities detailed in the following table.

Compliance projects

Project	Goal	Objectives	Scope	Expected outcomes
Petroleum and gas (P&G) activity: compliance framework.	To track and manage the P&G sector's environmental performance and impacts on Queensland's environment.	<p>To ensure industry holds and complies with the correct level environmental authority for the activity being carried out.</p> <p>To improve outcomes for protecting receiving waters, including groundwater, from discharge impacts, and protecting environmentally sensitive areas and important agricultural land.</p> <p>To increase awareness of rehabilitation practices, challenges faced and success rates.</p> <p>To ensure that residual salt is managed and not allowed to contaminate the landscape.</p> <p>To monitor compliance with the CSG Water Management Plan.</p> <p>To minimise the impacts of petroleum activities on the amenity of the community.</p>	<p>Administer CSG water management policies and legislation amendments when assessing disposal options for CSG water, including salt management and disposal.</p> <p>Banning the use of evaporation dams unless there are no feasible alternatives and ensuring town drinking water supplies are protected.</p> <p>An assessment of compliance by the CSG operators will commence in August 2010 and continue until December 2011.</p> <p>Undertake planned compliance inspections of Level 1 activities, construction of LNG facilities, impacts of development and operations on land and water assets and marine environments.</p> <p>Bore monitoring program: 300 bores audited within the 2011 calendar year.</p> <p>Community concerns about CSG activities will be responded to, and landowner opportunities and access to information on CSG activities on their properties will be enhanced.</p>	<p>Minimise harm to high value conservation areas, namely Category A, B and/or C environmentally sensitive areas.</p> <p>Manage risk of dams to prevent contaminant releases to land and/or waters.</p> <p>Rehabilitation successfully undertaken to restore the land after activities cease.</p> <p>Increased compliance with EA conditions</p> <p>Promotion of vigilance and/or awareness in terms of notification requirements and monitoring regimes.</p> <p>Monitoring information provided by CSG operators is independently verified.</p> <p>Increased level of information provided to the community.</p>
Unscheduled audits and inspections.	To track and manage the environmental performance of the CSG industry and impacts on the Queensland environment.	As above	Unscheduled audits and inspections will be conducted when triggered by information received from the community, gained during planned inspections or other sources.	As above

Further information—*Environmental Protection Act 1994*, draft Code of environmental compliance for level 2 petroleum activities.

16.3 Underground coal gasification



In addition to energy sources that have been historically used, like coal, and developing industries, such as CSG and LNG, the government is also responsible for regulating new and emerging energy technologies. Underground coal gasification (UCG) is the process by which coal is converted to gas underground via enforced combustion. UCG is used to access coal or resources that are either uneconomic to work by conventional open-cut or underground coal mining methods, or are inaccessible due to depth, geology or other mining and safety considerations.

On 18 February 2009, the Queensland Government released its policy position on the development of UCG technology. The key objective of the UCG policy was to provide the three approved UCG pilot projects with the opportunity to demonstrate the technical, environmental and commercial viability of the technology, and to ensure that this was undertaken in a way which would be safe, and authorised to mitigate and manage environmental risks.

For the pilot projects to continue, or this industry to expand, the government will have to be convinced of the technical viability of large scale UCG and that the environmental impacts and impacts on other industries and the community can be managed to an acceptable level. The government is only interested in supporting an environmentally sustainable UCG industry that would not adversely affect other industries or local communities. Consequently, it remains a priority for DERM to continue to closely monitor these pilot projects to ensure compliance with authorities and environmental protection.

Compliance projects

Project	Goal	Objectives	Scope	Expected outcomes
Petroleum and gas (P&G) activity.	To track and manage the P&G sector's environmental performance and impacts on Queensland's environment.	<p>To ensure industry holds and complies with the correct level environmental authority for the activity being carried out.</p> <p>To improve outcomes for protecting receiving waters, including groundwater, from discharge impacts, and protecting environmentally sensitive areas and important agricultural land.</p> <p>To increase awareness of rehabilitation practices, challenges faced and success rates.</p> <p>To ensure that residual salt is managed and not allowed to contaminate the landscape.</p> <p>To minimise the impacts of petroleum activities on the amenity of the community.</p>	<p>Compliance inspections will assess disturbance to land, water management and releases, dam management including hazard assessment and reporting, and rehabilitation of completed activities.</p> <p>Conduct proactive inspections of the three UCG sites, including inspections where sampling of groundwater is conducted.</p> <p>Ensure that recommendations from the independent scientific panel are implemented across the UCG sites.</p>	<p>Minimise harm to high value conservation areas, namely Category A, B and/or C environmentally sensitive areas.</p> <p>Manage risk of dams to prevent contaminant releases to land and/or waters.</p> <p>Rehabilitation successfully undertaken to restore the land after activities cease.</p> <p>Increased compliance with EA conditions.</p> <p>Promotion of vigilance and/or awareness in terms of notification requirements and monitoring regimes.</p> <p>Increased level of information provided to the community.</p>

Further information—*Environmental Protection Act 1994*, draft Code of environmental compliance for level 2 petroleum activities.

More information

To view this plan, previous annual compliance plans, or the Compliance Strategy 2010–14, visit <www.derm.qld.gov.au>.

General enquiries

General enquiry type	Contact number
Property, titles and valuations Environmental management Land management Science and research National parks, marine parks and forests Wildlife and ecosystems Coastal zone Water Indigenous interests Heritage conservation Climate change Vegetation management Mapping and surveying Camping bookings	Phone 13 QGOV (13 74 68) (8.30 am to 4.30 pm Monday to Friday, public holidays excepted)
Pollution hotline Wildlife carers or relocators Pollution reporting Marine stranding reporting Permit and licence management	Phone 1300 130 372
Bushfires, medical and other emergencies	Phone 000 (or 112 from a mobile phone)
CSG/LNG/UCG Hotline	Phone 13 25 23

To provide feedback on this plan, visit <www.derm.qld.gov.au>.