# **Queensland Department of Natural Resources and Water**



Queensland Wetlands Programme Evaluation Final Report

16 March 2009

Halcrow Pacific Pty Ltd and Institute for Sustainable Futures, UTS







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# Institute for Sustainable Futures, UTS

### **Halcrow Pacific Pty Ltd**

### Melbourne

Level 1, 542 Station Street, Box Hill, Melbourne, VIC 3128 Tel +61 3 9899 9777 Fax +61 3 9899 1214 www.halcrow.com

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# **Queensland Department of Natural Resources and Water**

# Queensland Wetlands Programme Evaluation Final Report

### 16 March 2009

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# **Executive Summary**

### Introduction and background

In 2003, the Queensland Wetlands Programme (QWP) was jointly established by the Australian and Queensland governments "to support projects and programs that will result in long-term benefits to the sustainable use, management, conservation and protection of Queensland wetlands".

The joint five year QWP (2003-2008) involved:

- \$8 million of funding from the Australian Government for the Great Barrier Reef Coastal Wetlands Protection Programme – the GBRCWPP implements measures for the long-term conservation and management of wetlands in the Great Barrier Reef catchment in line with actions in the Reef Plan.
- \$7.5 million from the Australian Government and \$7.5 million in-kind support from the Queensland Government for the Queensland Natural Heritage Trust Wetlands Programme the QNHTWP is a joint initiative under the Natural Heritage Trust and the \$15 million of funding supports the conservation and management of wetlands throughout Queensland.

Overall, the Programme has involved 38 projects in five focus areas that are delivering a range of new methodologies, mapping, information and decision-making tools to improve wetland management. The projects enable agencies, regional natural resource management bodies, landholders, environmental groups and other stakeholders to protect and manage wetlands for future generations.

The Australian Government's Department of the Environment, Water, Heritage and the Arts, and the Queensland Government's Environmental Protection Agency have the lead role with implementing the Programme. The Queensland Wetlands Joint Government Taskforce leads the design and delivery of the QNHTWP and GBRCWPP including determining priorities and arrangements for joint investment. The Taskforce is supported by a Working Group.

### Evaluation aim and objectives

In August 2007, the Queensland Wetlands Joint Government Taskforce approved an end-of-programme evaluation of the QWP as one of the 38 Taskforce approved projects. In order to be consistent with other evaluations of Natural



Heritage Trust programmes, the QWP evaluation project was to be administered by the Queensland Department of Natural Resources and Water (NRW). The evaluation was to be based on the *Monitoring, Evaluation and Reporting Strategy for the Queensland Wetlands Programme* (MER Strategy), and other key evaluation criteria.

The primary objective of this QWP evaluation is:

"to evaluate the effectiveness of the QWP including project success in meeting their objectives and overall QWP goal and objectives as well as the arrangements and processes used to implement the Programme. In doing this, the evaluation should reflect on lessons learnt, identify improvements and provide recommendations on the way forward for collaborative wetland management."

The evaluation assesses the effectiveness and efficiency of the QWP in terms of five focus areas and outputs from the MER Strategy, and two additional general focus areas covering governance and integration. The evaluation has assessed broad project products and achievements against project goals and objectives.

A challenge with this end-of-programme evaluation was that around half of the 38 QWP projects are only just being completed with resulting products and information being made available to stakeholders. In addition, several projects will continue through the first half of 2009, and cannot be fully evaluated – especially the regulatory-related projects in Focus Area 2 – Wetlands planning arrangements. These projects are also dependent on formal government processes. As appropriate, the evaluation has considered progress against objectives and outputs and taken the stage that each QWP project is at into account.

The evaluation used three primary methods to assess the efficiency and effectiveness of the QWP:

- Desktop analysis and review of information on the performance and progress of the Programme and 38 projects.
- An on-line evaluation survey that was sent to 710 key stakeholders.
- Structured interviews and meetings with stakeholders in targeted locations.

### Overarching conclusions and recommendations

Overall, the QWP has been largely effective and it has supported and enabled a range of quality projects and programs to enhance the sustainable use, management, conservation and protection of Queensland wetlands. Other



Australian jurisdictions lack such a comprehensive Programme with similar levels of mapping, inventory, information and guidance to support effective wetlands management.

The scope of the QWP was large and ambitious and while a number of projects are being completed, there have been significant achievements to date. Starting from a "low information base", individual QWP projects and results have significantly improved or appear likely to improve the wetlands information base and education and capacity building, especially in the longer term. Many of the methodologies and processes developed through the Programme had not previously been developed in Australia, and the Programme has set a new benchmark.

Significant Programme and project achievements include:

- development of a wetlands mapping and classification methodology
- undertaking wetland mapping for all of Queensland and capture of scientific and general wetland data
- a series of on-ground works with significant stakeholder engagement across the Great Barrier Reef catchment
- development of soil indicators and other wetland indicators and profiles
- development of a range of assessment tools, management guides, management systems and other information
- development of education and capacity building materials, and
- development of a "first-stop-shop" for accessing such information through Wetland Info.

A significant majority of respondents to the evaluation survey considered that:

- The Programme will result in long-term benefits to the sustainable use, management, conservation and protection of Queensland wetlands.
- The Programme has produced quality products and outcomes to improve wetlands management.

A range of on-ground activities have been undertaken through the Great Barrier Reef Coastal Wetlands Protection Plan to protect and rehabilitate significant coastal wetlands. These projects have been short-term and more localised, but have successfully engaged NRM bodies and local communities. However, future



management and monitoring of outcomes from these projects, including water quality and changes to wetland values, remains uncertain.

Maintaining momentum and ensuring critical wetland information continues to be available to stakeholders will be essential for the future.

1: It is recommended that critical information systems, such as the wetland mapping and inventory, are actively funded and maintained on an on-going basis to ensure that the information is accurate and supports any regulatory regime and general wetlands planning and management.

2: It is recommended that an additional targeted on-ground works programme is explored but that more time is provided for individual projects and that long term maintenance and monitoring is factored into these projects.

The significant challenge for the Programme to date has been progressing the development of a wetland regulatory regime under Focus Area 2. A series of projects on wetland planning arrangements was undertaken through the Programme to support the development of a regulatory regime to conserve and protect Queensland wetlands. However, the regulatory regime has yet to be established and uncertainty over changes in the regulatory regime is preventing some projects from being completed. However, the October 2008 announcement by the Queensland Premier to continue with development of a regulatory regime for the Great Barrier Reef provides the necessary authority and direction to complete this set of projects.

3: It is recommended that priority is given to completing the regulatory regime projects with appropriate regulatory assessment and stakeholder engagement. It will be important that any regulatory regime is supported by a range of incentives, management tools and information to ensure appropriate incentives for wetlands management.

With time, attention will also need to be given to protecting and conserving wetlands outside of the GBR with development of an appropriate regulatory regime supported by other instruments.

# Effectiveness of the Programme's projects in meeting their stated objectives and overall contribution.

Given that some of the QWP projects are still being completed, it is difficult to fully assess if all QWP projects will meet their stated objectives. However,



assuming that current projects continue and meet scheduled milestones for delivery, then it is likely that the majority of QWP projects will meet their stated objectives and contribute to the Programme's long term goal as outlined above. Long term monitoring of wetland extent and condition will be supported by various QWP projects and this is a priority for the future.

4: It is recommended that a framework is funded and developed to enable long term monitoring and reporting on wetland extent and condition covering the full range of wetland values.

### Effectiveness of the arrangements and processes used by the Programme

Consultation and stakeholder engagement have been strong elements of some of the QWP projects. Effective and ongoing engagement with key stakeholders will be vital with the continued roll-out of various project products and information. As identified above, appropriate stakeholder engagement will be vitally important with the development of any regulatory regime.

While a strategic approach to Programme communications was not established until two years into the Programme, a range of communications approaches have subsequently been used to successfully promote the Programme and project results. Following recent 2008 Programme workshops with key stakeholders, it will be important to maintain momentum and increase Programme and project communications with a range of stakeholders, especially local government, land managers, peak bodies, and Traditional Owners.

5: It is recommended that further communication on QWP products and outcomes is provided to the full range of Programme stakeholders, especially local government, land managers, peak bodies and Traditional Owners.

Programme governance and project administration and management of such a complex and inter-related Programme is challenging. While individual projects have produced quality results and outcomes, many projects have been affected by delays and required extensions. Notwithstanding well documented processes and terms of reference, there have been ongoing Programme governance, and resulting project approval, management and delivery challenges. More focused Programme and project administration and management, with a strong risk management approach, may have benefited the efficient completion of individual projects.



6: It is recommended that for any future Wetlands Programme, all project governance, administration, risk mitigation, quality assurance, and monitoring, evaluation and reporting processes are agreed at the start of such a Programme, and that these agreed processes are applied to all projects within such a Programme.

### Contribution and relevance of the Programme to improve the knowledge base and capacity of resource managers

The Programme has vastly improved the knowledge base and has started to extend the capacity of wetland managers in Queensland. As identified above, a priority for the future is to continue with capacity building and extension, and promote the availability of many products (e.g. wetland maps) will be critical to inform regional NRM plan and RIS reviews.

7: It is recommended that in the future the Programme focus on capacity building and extension to ensure that the range of products and information is fully communicated to key stakeholders responsible for wetland management and/or responsible for planning or managing activities that may affect wetlands.

#### Integration, adaptive management and consultation

Programme and project integration was important for such a large and multi-faceted initiative as the QWP. Programme and project integration has been a significant feature of the QWP but is more apparent in some Focus Areas and for some projects than others, especially within Focus Area 1 – Improving the wetland information base.

The roles of both the Programme Manager and Programme Coordinator were essential to achieve effective integration, and keep the Programme moving forward between Taskforce and Working Group meetings. The Programme Manager has provided effective strategic oversight, and day-to-day direction and support for project managers. The Coordinator had an important role in ensuring efficient administration and reporting of the Programme. Both the manager and coordinator roles were required from the start of the Programme to provide consistent integration, coordination and project support.

The Programme has important linkages with a range of other Great Barrier Reef and NRM initiatives in Queensland including the Reef Plan, regional NRM planning and investment, and the National Action Plan for Salinity and Water Quality (NAP). Some projects featured strong integration with other initiatives. For example, the Pilot Programme for on-ground works sought to ensure, where



possible, that the projects furthered actions under the Reef Plan and complemented the NRM plans and Regional Investment Strategies.

Adaptive management is an important feature of the overall Programme. For example, an adaptive management framework was developed and used as part of the *Investment Strategy for the Queensland Wetlands Programme* (2004) adopted by the Joint Taskforce. How adaptive management can be further applied to best practice wetland management to further influence the Programme (or any successor) in the future could be reviewed.

Some QWP projects featured extensive consultation, for example, with groups requiring wetlands mapping and access to wetlands information. However, other projects, especially relating to the regulatory framework, were conducted in-house because of Cabinet processes and confidentiality requirements. A QWP stakeholder engagement framework identifying key stakeholders, interests and likely engagement timelines and methods would have been valuable. All projects could have then factored in effective engagement into their design and implementation. This would have assisted with broader Programme engagement, and promoted a more integrated and consistent approach to stakeholder engagement.

### Key gaps, constraints, risks and opportunities

The effectiveness of the Programme has been influenced by several constraints. Programme governance, approval and reporting processes were most often identified as a key constraint on the timely approval, commissioning and delivery of most QWP projects. Different reporting arrangements for the GBRCWPP and QNHTWP were also seen as affecting communication and Programme integration. A second major constraint was the 12 month timeframe to implement the on-ground projects. This limited the scope of projects, constrained engagement and affected the quality of conservation outcomes.

Long-term monitoring and reporting on wetland condition is a key gap, but this monitoring could not be addressed before the Programme mapping and inventory. Long term monitoring is a priority for the future, and could be linked into existing state of the environment reporting and other similar initiatives.

Limited engagement with various stakeholders including landholders, local government and Traditional Owners was commonly identified. There was also a



gap in extension and communication and the need to get new wetland management mapping and tools used by stakeholders.

A key risk with the Programme was the lack of progress with the wetland regulatory framework. A regulatory framework also needed to be matched with management tools, funding and incentives – otherwise the broader Programme goals would not be achieved.

# Key learnings and the key factors for success for future collaboration in wetland management

Overall, the Programme has provided a solid foundation for Queensland wetlands conservation and management for the near future. However, the ultimate success of the Programme will be assessed on longer term improvement in wetland condition and trend, and increased stakeholder understanding of the full range of wetlands values.

It will be important that Programme momentum is maintained into the future to fully capitalise on the initial five year investment. Many of the projects and associated tools and information are only now being finalised and will require further promotion, support and ongoing review.

8: It is recommended that further investment is made to support the Queensland Wetlands Programme with the primary focus being on maintenance and updating of critical information (e.g. mapping and inventory), capacity building, extension, and communication of the new wetland information and tools developed through the first five years.

Many issues and actions identified within the Queensland Wetland Strategy (1999) and Implementation Plan (2004) have been addressed through the QWP. It is appropriate and timely to undertake a ten year review of the Wetland Strategy, and identify the next set of actions for a new implementation plan. This should occur as a priority given the ever changing policy and programme funding landscape, especially with the introduction of the Australian Government's Caring for our Country (the replacement for the Natural Heritage Trust).

9. It is recommended that the Queensland Strategy for the Conservation and Management of Queensland's Wetlands (1999) is reviewed and that a new implementation plan is developed. This should occur as a priority given the results of the Queensland Wetlands Programme, and the ever changing policy and programme funding landscape, especially with the introduction of the Australian Government's Caring for our Country.



Finally, it would be beneficial to further draw on program logic to plan and inform any future investment in the QWP.

10: It is recommended that the Queensland Wetlands Programme is reviewed in accordance with program logic, and that program logic is also used to inform subsequent investment in the Programme (or any successor).



# **Acronyms and Glossary**

DSS Decision Support System

DEWHA (Australian Government) Department of the Environment,

Water, Heritage and the Arts

DPI&F (Queensland) Department of Primary Industries and Fisheries

EPA (Queensland) Environmental Protection Agency

FMS Farm Management System

GBRCWPP Great Barrier Reef Coastal Wetlands Protection Programme

GBRMPA Great Barrier Reef Marine Park Authority

GLM Grazing Land Management

NAP National Action Plan for Salinity and Water Quality

NHT Natural Heritage Trust

NRM Natural Resource Management

NRW (Queensland Department of) Natural Resources and Water

QNHTWP Queensland Natural Heritage Trust Wetlands Programme

QWJGT Queensland Wetlands Joint Government Taskforce

QWP Queensland Wetlands Programme

Ramsar International Convention on Wetlands (Ramsar, Iran, 1971)



## 1 Introduction

### 1.1 Background and context

Queensland's wetlands are complex ecosystems that sustain the natural environment and support community social and economic wellbeing. Wetlands absorb and release water, filter and transport nutrients and sediment, are nurseries for fish and crustaceans, and support recreation, education and science. Queensland's wetlands provide essential habitat for some 130 fish species, 150 species of waterbird (both resident and migratory) and more than 3,000 plant species – many considered rare or threatened.<sup>1</sup>

Wetlands are found throughout Queensland, from the Gulf of Carpentaria and Cape York Peninsula in the north, along all of the east coast and adjacent to the Great Barrier Reef (GBR), and inland to the south-west and Channel Country. Queensland's 39 Ramsar listed wetland types include about 400,000 ha of mangroves, more than 600,000 ha of saline coastal flats, and almost 300,000 ha of intertidal flats.<sup>1</sup>

Queensland wetlands are threatened by urban, agricultural and industrial development. Wetland hydrology may be altered through drainage, construction of dams, or regulation of river flows, and urban and rural land uses release pollutants and cause increased sedimentation. Pests, including feral pigs and carp, and weeds, such as *Hymenachne amplexicaulis*, adversely affect wetlands. Increasingly, wetlands are being impacted by climate change and changing water regimes that affect the integrity of wetland ecosystems.<sup>1</sup>

As an example, for wetlands in the Wet Tropics:

"...the most serious factors affecting health in wet tropics streams and wetlands are changes to habitats, including invasion by exotic weeds and loss of riparian vegetation, which can cause major changes to waterway morphology, habitat complexity, food availability, gas exchange with the atmosphere and, therefore, biodiversity. Organic effluents have been shown to cause fish kills and a major decrease in biodiversity as a result of oxygen depletion; and deposition of fine sediments derived from agriculture and other sources reduce biodiversity in streams." (Brodie et al 2008, p. 34)

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<sup>&</sup>lt;sup>1</sup> Primary sources for this section: WetlandInfo (accessed 30 October 2008); EPA 1999, Strategy for the Conservation and Management of Queensland's Wetlands, Queensland; EPA 2005 Monitoring, Evaluation and Reporting Strategy for the Queensland Wetlands Programme.



Concern about the condition and loss of wetlands throughout Queensland led to the development of the *Strategy for the Conservation and Management of Queensland's Wetlands* (EPA 1999). The commitments outlined in the 1999 Wetlands Strategy were reinforced by Queensland's signing of the *Natural Heritage Trust Extension Bilateral Agreement* between the Australian and Queensland Governments in August 2004. The Bilateral Agreement included establishment of the Queensland Natural Heritage Trust Wetlands Programme (QNHTWP) (under Clause 25) to support Queensland in meeting its obligations under Clause 24 of the Bilateral:

"Within three years of signing this Agreement the State agrees to develop and implement new statutory planning and development assessment arrangements to protect wetlands." (Commonwealth of Australia and the State of Queensland 2004).

In a related development, in December 2003, the Great Barrier Reef Water Quality Protection Plan (Reef Plan) was launched by the Australian and Queensland Governments with the goal of "halting and reversing the decline in water quality entering the Reef within 10 years" (The State of Queensland and Commonwealth of Australia 2003). As part of this initiative, funding was provided for the Great Barrier Reef Coastal Wetlands Protection Programme (GBRCWPP) to assist in meeting the goal and objectives of the Reef Plan.

### 1.2 Queensland Wetlands Programme overview

In 2003, the Queensland Wetlands Programme (QWP) was jointly established by the Australian and Queensland governments "to support projects and programs that will result in long-term benefits to the sustainable use, management, conservation and protection of Queensland wetlands". To support Clause 24 of the Bilateral Agreement (see above), the Australian and Queensland Governments agreed to matching funding and also agreed "that investments in the Programme will complement other Commonwealth funded wetlands programs in Queensland" i.e. the GBRCWPP.

The joint five year QWP (2003-2008) involved:

- \$8 million of funding from the Australian Government for the Great Barrier Reef Coastal Wetlands Protection Programme – the GBRCWPP implements measures for the long-term conservation and management of wetlands in the Great Barrier Reef catchment in line with the actions in the Reef Plan (The State of Queensland and Commonwealth of Australia 2003).
- \$7.5 million from the Australian Government and \$7.5 million in-kind support from the Queensland Government for the Queensland Natural



Heritage Trust Wetlands Programme – the QNHTWP is a joint initiative under the Natural Heritage Trust and the \$15 million of funding supports the conservation and management of wetlands throughout Queensland.

The QWP was announced in 2003 and combined the GBRCWPP and QNHTWP initiatives. However, it did not effectively start until the end of the first year and little funding was spent in 2003-04.

Overall, the Programme has involved 38 projects that are delivering a range of new mapping, information and decision-making tools. The projects enable agencies, landowners, regional natural resource management bodies and environmental groups to protect and manage wetlands for future generations.

The Australian Government's Department of the Environment, Water, Heritage and the Arts, and the Queensland Government's Environmental Protection Agency have the lead role with implementing the Programme. Other departments, such as the Queensland Department of Natural Resources and Water, the Queensland Department of Primary Industries and Fisheries, and key stakeholders are also involved in the Programme's implementation and delivery of individual projects.

The Queensland Wetlands Joint Government Taskforce leads the design and delivery of the Natural Heritage Trust and Great Barrier Reef Coastal Wetlands Programs including determining priorities and arrangements for joint investment. The Taskforce is supported by a Working Group. The Joint Queensland and Australian Government Natural Resource Management Steering Committee (JSC) assesses performance reports and approves progress funding for QNHTWP projects.

The QWP is structured at three levels (see Figure 1.1):

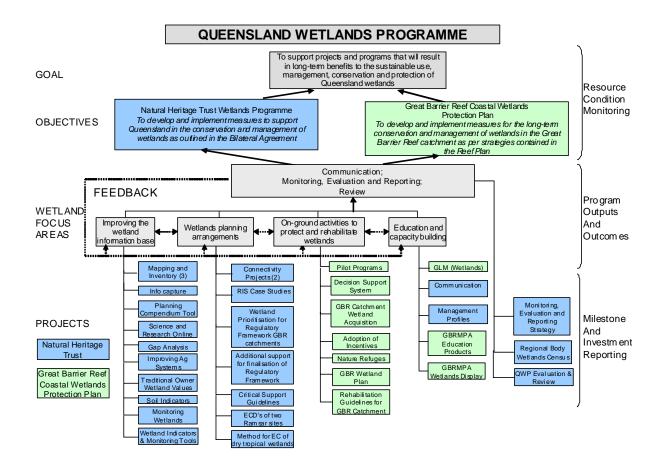
- Programme level providing high level direction through a goal and objectives for the GBRCWPP and QNHTWP.
- Focus area level providing an operational structure for grouping related issues and projects under five focus areas see below.
- Project level to generate new information and mapping, provide tools and guidelines to support decision making, and ensure support for onground works (EPA 2005).



Five focus areas have been established to assist in and guide project investment and group related projects and topics (see Figure 1.1:

- Focus area 1: Improving the wetland information base.
- Focus area 2: Wetland planning arrangements.
- Focus area 3: On-ground activities to protect and rehabilitate wetlands.
- Focus area 4: Education and capacity building.
- Focus area 5: Communication, monitoring, evaluation and reporting, and review.

Figure 1.1: Queensland Wetlands Programme goal, objectives, focus areas and projects



Although the 38 QWP projects sit within specific focus areas, often QWP projects addressed multiple focus areas, for example, on-ground activities also involved education and capacity building. The focus areas have provided a broad Programme framework but other project and activity groupings have evolved



through time, for example, grouping of projects and stakeholders into policy, technical and on-ground works.

Two additional focus areas covering governance and integration were also identified to assist overall Programme evaluation (see section 1.3 below). The focus areas and the efficiency and effectiveness of individual projects are evaluated throughout this report.

For the purpose of the QWP, wetlands in Queensland have been broadly defined as:

"Areas of permanent or periodic/intermittent inundation, with water that is static or flowing fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed 6m. To be a wetland the area must have one or more of the following attributes:

i. at least periodically the land supports plants or animals that are adapted to and dependent on living in wet conditions for at least part of their life cycle.

ii. the substratum is predominantly undrained soils that are saturated, flooded or ponded long enough to develop anaerobic conditions in the upper layers.

iii. the substratum is not soil and is saturated with water, or covered by water at some time." (EPA 2005).

### 1.3 Evaluation aim and objectives

In August 2007, the Queensland Wetlands Joint Government Taskforce approved an end-of-programme evaluation of the QWP as one of the 38 Taskforce approved projects. In order to be consistent with other evaluations of Natural Heritage Trust programmes, the QWP evaluation project was to be administered by the Queensland Department of Natural Resources and Water (NRW).

The Programme evaluation was delayed until the second half of 2008 because of the need for projects to be completed prior to evaluation. In August 2008, NRW commissioned independent consultants – Halcrow Pacific Pty Ltd and the Institute for Sustainable Futures, University of Technology Sydney – to undertake the QWP evaluation. The evaluation was to be based on the *Monitoring, Evaluation and Reporting Strategy for the Queensland Wetlands Programme* (MER Strategy) (EPA 2005), and other key evaluation criteria. The Terms of Reference for the evaluation are in Appendix A.

The MER Strategy (EPA 2005) identified that the Programme itself would be monitored to ensure that "project and programme milestones are being met, investment is accounted for, and MER Strategy measures are implemented and



adhered to." Further, "evaluation will be conducted through an assessment of the topics of effectiveness, appropriateness and efficiency of the projects and the Programme as a whole." (EPA 2005, pp. 8-9). As identified in Section 1.4 below, the scope of this QWP evaluation did not include evaluating the appropriateness of QWP projects.

The primary objective of this QWP evaluation is:

"to evaluate the effectiveness of the QWP including project success in meeting their objectives and overall QWP goal and objectives as well as the arrangements and processes used to implement the Programme. In doing this, the evaluation should reflect on lessons learnt, identify improvements and provide recommendations on the way forward for collaborative wetland management."<sup>2</sup>

The evaluation assesses the effectiveness and the efficiency of the QWP in terms of the five identified focus areas and outputs from the MER Strategy (EPA 2005), and two additional general focus areas:

- Focus area 6: Governance and contractual arrangements.
- Focus area 7: Integration of and between Focus Areas and adaptive management to continually improve the Programme.

The detailed focus area outcomes, outputs and performance measures are also outlined in the terms of reference in Appendix A.

Specific objectives for the evaluation are (see Appendix A):

- Evaluate the effectiveness of the Programme's projects in meeting their stated objectives and overall contribution to the Programme's stated goal.
- Evaluate the effectiveness of the arrangements and processes used by the Programme including consultation, engagement and communication processes, legacy issues and implementation strategies.
- Document the contributions and relevance of the Programme to improve the knowledge base and capacity of resource managers in relation to wetland management in Queensland.
- Document the key learnings and the key factors for success for future collaboration in wetland management.

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<sup>&</sup>lt;sup>2</sup> Queensland Department of Natural Resources and Water invites offers for Queensland Wetlands Programme Evaluation, Offer Number NRO0117, p. 9.



A cross-agency Evaluation Steering Committee was established to ensure the scope of the evaluation project was clearly defined and to guide the project team in the delivery of tasks and outputs.

### 1.4 Evaluation scope, and key assumptions and limitations

The scope of the QWP evaluation covers three levels:

- overall evaluation of the Programme
- evaluation of each focus area, and
- evaluation of individual projects within each focus area i.e. all 38 projects funded through the QNHTWP and the GBRCWPP.

The evaluation focuses on overall Programme and project performance and not on wetland resource condition and trend. However, it is important that long term monitoring of wetland resource condition and trend is established to assess if management responses are improving wetland condition.

The evaluation has assessed broad project products and achievements against project goals and objectives. The evaluation has identified key gaps and highlighted opportunities to improve wetland management, but it has not explicitly assessed whether individual projects were warranted. It has assumed that Programme scoping and prioritisation of projects was appropriate. However, the evaluation has identified several potential projects or follow-up projects to existing QWP projects.

The evaluation uses and builds upon the key performance measures identified within the MER Strategy (EPA 2005), and those developed for the evaluation with the two additional general focus areas 6 and 7 (see Appendix A).

A limitation to this end-of-programme evaluation is that around half of the 38 QWP projects are only just being completed with resulting products and information being made available to stakeholders. In addition, five projects will continue through the first half of 2009, and cannot be fully evaluated – especially the regulatory-related projects in Focus Area 2 – Wetlands planning arrangements. These projects are also dependent on formal government processes.

As appropriate, the evaluation has considered progress against objectives and outputs and taken the stage that each QWP project is at into account. The evaluation has evaluated both process outcomes and potential outcomes if the project has not been fully completed.



The evaluation team benefited from regular updates by the QWP Manager, QWP Coordinator and project team leaders including an in-depth briefing on key QWP projects and the status of project outputs on 31 October 2008.

Specific assumptions or limitations as they relate to different parts of the methodology are identified in Chapter 2.

### 1.5 Structure of this report

This report discusses and presents the key findings and recommendations from the Programme evaluation.

Chapter 1 provides background and introductory information on Queensland wetlands, the QWP, and this evaluation. Chapter 2 outlines the evaluation methodology including desktop analysis, an on-line survey and stakeholder interviews. A high level overview of the results from the on-line survey is presented in Chapter 3. As applicable, particular survey results are considered in relevant focus area chapters.

The seven focus areas are evaluated in chapters four to ten covering:

- the effectiveness of the projects in each focus area in meeting their stated objectives and overall contribution to the Programme's stated goal
- the effectiveness of the arrangements and processes used by the Programme including consultation, engagement and communication processes, legacy issues and implementation strategies, and
- the contributions and relevance of the Programme to improve the knowledge base and capacity of resource managers in relation to wetland management in Queensland.

The structure of the chapters follows the focus areas as follows:

- Chapter 4: evaluation of Focus Area 1: Improving the wetland information base.
- Chapter 5: evaluation of Focus Area 2: Wetland planning arrangements.
- Chapter 6: evaluation of Focus Area 3: On-ground activities to protect and rehabilitate wetlands.
- Chapter 7: evaluation of Focus Area 4: Education and capacity building.
- Chapter 8: evaluation of general Focus Area 5: Communication, monitoring, evaluation and reporting, and review.



- Chapter 9: evaluation of Focus Area 6: Governance and contractual arrangements.
- Chapter 10: evaluation of Focus Area 7: Integration of and between Focus Areas and adaptive management to continually improve the Programme. Consultation and engagement processes are also considered in this chapter.

Chapter 11 considers key constraints, gaps, risks and opportunities relating to the Programme. Key learnings and key factors for future wetlands collaboration and wetland management are outlined in Chapter 12. The report concludes with a series of conclusions and recommendations in Chapter 13.



# **2** Evaluation Methodology

#### 2.1 Introduction

The evaluation used three primary methods to assess the efficiency and effectiveness of the Queensland Wetlands Programme (QWP):

- **Desktop analysis and review** of information on the performance and progress of the Programme and 38 projects.
- An on-line **evaluation survey** that was sent to 710 key stakeholders involved with the Programme.
- Structured interviews and meetings with stakeholders in targeted locations.

Results from the analysis and synthesis of data and information were assessed and key findings and recommendations for future wetlands collaboration and management were presented and discussed in a workshop with the Project Steering Committee in November 2008.

### 2.2 Desktop analysis and review

A desktop analysis and review of information was undertaken on the performance and progress of the Programme and individual projects. This included consideration of project proposals, project reports, Programme half-year and annual reports, financial reports, website information, and other information sources, as appropriate.

The desktop analysis evaluated and documented the efficiency and effectiveness of the 38 projects in meeting their stated goals and objectives, and also considered the overall contribution to the QWP stated goal and objectives (see Figure 1.1). In particular, the desktop analysis evaluated and identified:

- a) The level of integration with industry, local government, landholders and other stakeholders.
- b) Consultation, engagement and communication processes, legacy issues and implementation strategies.
- c) Improvements to the knowledge base and capacity of resource managers.
- d) Key learnings and key factors for future collaboration in wetland management.
- e) Key constraints, gaps, risks and opportunities.



For the desktop analysis and review, a project assessment table was developed and used to ensure a structured and consistent assessment of all Focus Areas and projects (see Appendix B). This included completed projects and those still being completed and implemented. The stage of completion was taken into account in the project assessment.

Key criteria in the project assessment table included:

- Anticipated project goals, outputs and outcomes
- Project efficiency and effectiveness
- Integration (especially alignment with other projects or external initiatives)
- Consultation, engagement and communication
- Knowledge base and capacity
- Key gaps, constraints and risks
- Key learnings and opportunities
- Overall contribution to the Programme.

Questions in the assessment table were used to capture information and project results and responses were grouped to inform the overall Focus Area and Programme assessment (see Chapters 4 to 12).

A desktop analysis and review is not able to fully address all evaluation questions or capture a complete project evaluation. The on-line survey and structured interviews (see below) were critical to broaden the available information, ensure that stakeholders' views were taken into account, and to provide for a more robust and complete evaluation. For example, the structured interviews contained questions about how stakeholders were involved with various QWP projects, and address the broader questions of integration, engagement, knowledge base and communication.

### 2.3 Evaluation survey

An on-line evaluation survey was prepared and sent to some 710 stakeholders including project managers, project officers, researchers, wetlands managers, local government officers, industry representatives, landholders, Traditional Owners, community groups, and other stakeholders involved in the Programme. The stakeholders was primarily drawn from a list of stakeholders and groups identified for the mid-2008 QWP stakeholder workshops. However, this list was added to with other stakeholders, project managers, wetlands researchers and managers identified through this evaluation. The on-line survey and evaluation was



promoted in the weekly regional Natural Resource Management e-newsletter – The Bugle – and in the Queensland Farmers Federation weekly e-newsletter.

The evaluation survey questions were based on the seven Focus Areas and key performance measures identified in Appendix A. The evaluation survey contained four main sections:

- Part A General Information.
- Part B Queensland Wetlands Programme (questions relating to the overall Programme).
- Part C QWP Projects (questions relating to specific projects within the overall Programme) – respondents were asked to identify a specific QWP project and respond to a series of questions about that project.
- Part D Questions about the design of this survey.

Respondents with limited involvement with the Programme were asked to complete Parts A, B and D of the evaluation survey. Respondents with targeted involvement with QWP project(s), but less involvement with the overall Programme, were asked to complete parts A, C and D.

The majority of the evaluation survey questions were presented in a 'statement and response' format. A respondent was asked to select whether they:

- 1. Strongly agree with the statement
- 2. Agree with the statement
- 3. Neither agree or disagree with the statement
- 4. Disagree with the statement
- 5. Strongly disagree with the statement,

Unable to respond.

Several open ended questions were also asked about the Programme, for example, concerning key learnings, constraints and legacies. The survey questions are presented in Appendix C.

The survey was available from 17 September 2008 to 17 October 2008. An initial invitation was sent to each stakeholder and this was followed by two repeat invitations. To encourage survey responses, two \$75 vouchers were offered to randomly selected respondents.



LimeSurvey, an open source survey software, was used for the on-line survey. This software allows the conduct of a secure on-line survey which restricts access by means of invitations and security tokens. It has the advantage that coding of the replies is automatic. Participants are invited by e-mail, which includes a link to click on and a security token. The survey's questions are then presented singly or in groups. The layout of the survey is flexible and questions can be formatted in a wide variety of ways. Replies are recorded directly into a database and a record of the respondent's security token is made to prevent a second reply from the same person. Analysis of the survey replies was directly made from the database with data also exported to Excel to generate a range of figures and tables as used throughout this report.

The survey is comprehensive and is designed to provide a deeper level of information than that which could be obtained from a short survey. It is not unexpected that several concerns were expressed about the length of the survey. In some instances, the evaluation team became aware that the responses were made by organisations rather than individuals, and possibly more weight can be given to the results than that simply indicated by the number of responses. However, a conservative approach has been taken assuming that all responses were from individuals.

### 2.4 Structured interviews

Information obtained from the analysis and survey was refined through structured interviews with key stakeholders. The interviews were based on the evaluation methodology and performance measures in the MER Strategy (EPA 2005).

Thirty-seven organisations or individuals were approached regarding participating in a structured interview. Twenty-six structured interviews were subsequently held with a cross-section of stakeholders. Four structured interviews were held by telephone to ensure a representative sample of responses and allow for an efficient interview process.

Stakeholders were identified from the following areas:3

- Key stakeholders: policy and planning including
  - Australian Government Department of the Environment, Water, Heritage and the Arts and other agencies, such as Great Barrier Reef Marine Park Authority.

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<sup>&</sup>lt;sup>3</sup> This grouping of stakeholders builds off that proposed by the Project Steering Committee on 11 August 2008.



- State Government Departments including the EPA, Natural Resources and Water, and Primary Industries and Fisheries.
- o Local governments.
- Key stakeholders: departmental and technical staff including
  - o QWP project leaders and team members.
  - o Research institutions including CSIRO, AIMS and ACTFR.
- Key stakeholders: taskforce and working groups including
  - Queensland Wetlands Joint Government Taskforce and Working Group.
  - o Reef Plan Intergovernmental Operational Committee.
- Key stakeholders: on-ground activities including
  - o Regional NRM Bodies.
  - o Land managers.
  - o Environmental and conservation groups.
- Other end users including:
  - o Traditional Owners and Indigenous Groups.
  - o Environmental and conservation groups.
  - o Wetlands Education groups, and
  - Peak bodies.

Stakeholders were interviewed from a four NRM regions in Queensland covering:

- Brisbane SEQ Catchments.
- Toowoomba Condamine Alliance.
- Townsville Burdekin Dry Tropics NRM.
- Cairns Terrain NRM (Far North Queensland).

A participant consent form was used for all structured interviews. The form explained the interview process and how information will be used. The consent form explained that individual respondents would not be directly identified in any report without prior approval. Participants were asked to sign the consent form prior to the start of an interview.



An additional seven short interviews and meetings were held with inter-state wetlands managers and stakeholders to enhance understanding of wetland management and relative QWP performance. This included short telephone interviews with members of the inter-government National Wetlands and Waterbirds Taskforce.

### 2.5 Synthesis of information and evaluation results

Collectively, the raw data and information from the desktop analysis, survey and interviews was synthesised and interpreted to provide an in-depth evaluation report against the Programme objectives and Focus Areas. The synthesis and interpretation phase was crucial to add value and ensure a meaningful evaluation report rather than purely a collation and summary of the information captured. This required looking across the different information sources to evaluate the efficiency and effectiveness of project products and outcomes, and to consider the successes and challenges, the key learnings, gaps and risks, and the legacy issues. The individual chapters of the evaluation report, and especially the closing chapters, bring these components and results together.



# 3 Evaluation Survey Results

This chapter presents the high level results from the Queensland Wetlands Programme (QWP) on-line evaluation survey. The evaluation survey was a key component of the overall evaluation of the Programme. This chapter outlines the number and type of respondents to the survey, the level of involvement of respondents in the Programme, and the views of respondents on the overall effectiveness and quality of the Programme and projects.

Detailed survey results as they relate to specific Focus Areas, for example, onground works or education and capacity building, are considered in relevant Focus Area chapters (see chapters four to ten). For details relating to the methodology, design and structure of the survey, and the range of stakeholders invited to participate in the survey, please refer to Chapter 2. The complete evaluation survey is presented in Appendix C.

### 3.1 Survey responses

### 3.1.1 Number and type of survey respondents

A total of 94 completed responses were received from a range of Programme stakeholders. A response rate of 94 (or 13 percent) from some 710 invitations is considered a fair return for this type of voluntary response survey. The responses are not representative in a statistical sense.

Respondents were initially asked to identify in what capacity they were involved in the Programme. Respondents most often identified their involvement in the Programme as a departmental or agency officer, with project leader the second most commonly identified category (see Figure 3.1). This result suggests that a significant proportion of respondents to the survey were most likely from a Queensland or Australian Government department or agency. This is understandable given the nature of many of the QWP projects which were undertaken to support the Natural Heritage Trust Extension Bilateral Agreement (2004).

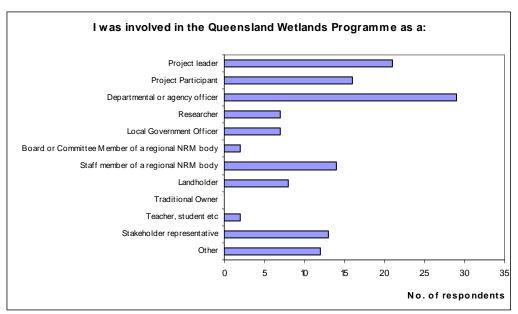
As can be seen in Figure 3.1 below, one-sixth of respondents were from regional NRM bodies, with the majority of these identifying themselves as staff members. Regional NRM bodies were a key stakeholder and target of the overall Programme.

If the survey is representative of a range of stakeholders, the cross-section of respondents identifying themselves as project participants, stakeholder representatives, NRM staff and landholders suggests that the survey was somewhat



successful in achieving a broad spectrum of responses from Programme stakeholders.

Figure 3.1: Involvement in the Queensland Wetlands Programme (General Survey Question 1)



There was a lower response rate from respondents who identified themselves as local government representatives and no response from Traditional Owners. This may suggest a lower level of engagement with, or that there was limited knowledge of the Programme amongst, local governments and Traditional Owners. Participation in the evaluation (or in the QWP projects) may not have been culturally appropriate for Traditional Owners. Looking ahead, there may be opportunities to broaden knowledge of, and involvement in, the Programme by both local government officers and Traditional Owners.

#### 3.1.2 Level of involvement with Programme and projects

The survey asked respondents to rate their level of involvement in the Programme as High, Moderate, Targeted or Low defined as:

- High strongly aware of the Programme and deeply involved with specific projects
- Moderate aware of the Programme and some involvement with specific projects
- Targeted high level of detailed knowledge in a particular project but lacking in-depth knowledge of the broader Programme, and

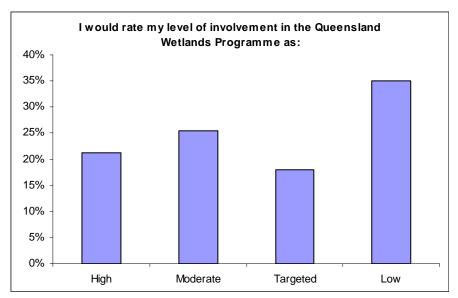


• Low – limited awareness of the Programme and not specifically involved with projects.

As illustrated in Figure 3.2, the survey achieved a good representation across all levels of involvement, with:

- 21 percent of respondents rating their involvement as High
- 26 percent as Moderate
- 18 percent as Targeted. and
- 35 percent as Low.

Figure 3.2: Level of Involvement in the Queensland Wetlands Programme (Survey Question A2)



In Section C of the survey, respondents were asked which Programme project they were most directly involved with. The projects that received the highest responses were:

- The Mapping and Classification project 16 percent
- The Great Barrier Reef Pilot Programme project 11 percent
- Wetlands Management Profiles project 8 percent, and
- Improving wetland management in agricultural systems project 7 percent.

The above result could be explained by the relative timing, size and scope of the projects. For instance, one of the first projects, the Mapping and Classification



project, was a large and complex project that required widespread consultation and engagement. It is therefore not surprising that it received the most responses. The response rate for the Great Barrier Reef (GBR) Pilot Programme is also not unexpected given it involved some 22 individual sub-projects throughout the GBR catchment.

### 3.1.3 Responses to high level questions on the Programme and projects

The evaluation survey asked respondents two high level questions regarding the overall long-term benefit of the Programme and the quality of products and outcomes.

Respondents were asked as to whether they thought the Programme has supported projects that "will result in long-term benefits to the sustainable use, management, conservation and protection of Queensland wetlands."

As Figure 3.3 illustrates, the overall response was a clear and positive indication that the majority of respondents believe the Programme will result in long-term benefits to the sustainable use, management, conservation and protection of Queensland wetlands.

Overall, the Programme has supported projects that "will result in longterm benefits to the sustainable use, management, conservation and protection of Queensland wetlands": 50% 40% 30% 20% 10% 0% Agree Neither agree Disagree Strongly Unable to Strongly agree or disagree disagree respond

Figure 3.3: Overall Long-term Benefit of the Programme (Survey Question B1)

With the above results, it is interesting to note the relationship between a respondent's level of involvement with the Programme, and their response to the above question. Those respondents that rated their level of involvement in the Programme as "High" (see Figure 3.2 above), exclusively rated their level of



agreement with the above statement as either "Strongly agree" or "Agree" (with a bias towards "Strongly agree"). Conversely, the only respondents to "Strongly disagree" with the above statement were those respondents who rated their level of involvement as "Low".

This suggests a positive relationship – the higher the degree of involvement in the Programme, the more likely the respondent is to "Strongly agree" that the Programme will result in long-term benefits to the sustainable use, management, conservation and protection of Queensland wetlands.

When asked whether the Programme has produced quality products and outcomes to improve wetlands management, the outcome is again definitive. The majority of respondents either "Strongly agree" or "Agree" that the Programme has produced quality products and outcomes to improve wetlands management (see Figure 3.4).

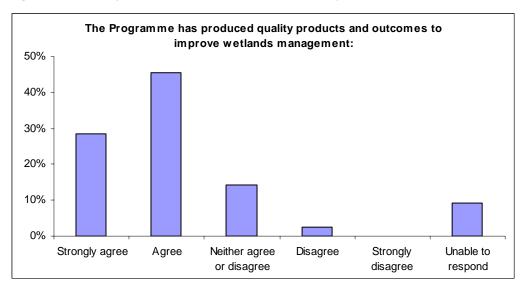


Figure 3.4: Quality of Products and Outcomes (Survey Question B2)

As above with Question B1, respondents that rated their level of involvement in the Programme as "High", exclusively rated their level of agreement with the above statement as either "Strongly agree" or "Agree" (however, the preference towards "Strongly agree" was not as large in this instance). While there were no respondents who chose to "Strongly disagree" with the statement, it was only those with a "Low" level of involvement in the Programme that chose to "Disagree" with this statement. These results suggest that, generally, the greater the level of involvement a respondent had with the Programme, the more likely that respondent is to view the Programme in a positive light. It would be difficult for



stakeholders with a low level of understanding of the Programme to be able to fully comprehend and comment on the outputs and outcomes of the Programme.

# 3.1.4 Responses relating to the survey itself

The final part of the survey (Section D) asked respondents several questions about the evaluation survey itself in order to evaluate the survey instrument and allow for feedback on the relevance of the questions asked.

Respondents were asked to rate their level of agreement with the statement "I was able to easily access the website and complete the survey on-line". Given that the survey was an internet-based online survey, the result of this question would indicate whether the decision to conduct the survey on-line impacted on the overall survey response rate.

As Figure 3.5 illustrates, the majority of respondents selected "Strongly agree" or "Agree" with the above statement. Importantly, there were no "Strongly disagree" responses. This suggests with a level of confidence that respondents were able to access the website and complete the survey, and that the overall survey response rate was not impacted by the decision to conduct the survey on-line.

That said, it is acknowledged that the survey did take several seconds to load each page, and this may have caused some frustration for respondents and reduced the number of completed responses. A few participants considered the survey limited their ability to provide adequate feedback on the Programme and particular projects, and that it was too repetitive.

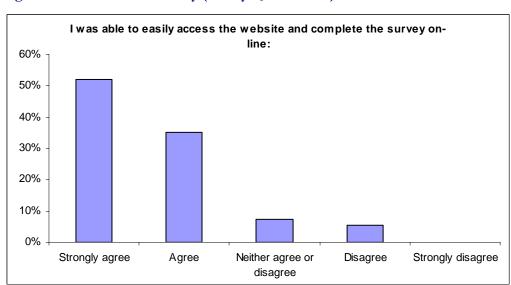


Figure 3.5: Access to the Survey (Survey Question D1)



Respondents were also asked if the survey questions "targeted information relevant to evaluate the performance and outcomes of the Programme". Some 65 percent of respondents chose to "Agree" with the statement (see Figure 3.6). Given that few respondents chose to "Disagree" or "Strongly disagree", this suggests that the outcomes of the survey can be used with confidence in contributing to the assessment of the efficiency and effectiveness of the QWP.

The survey questions targeted information relevant to evaluate the performance and outcomes of the Queensland Wetlands Programme: 70% 60% 50% 40% 30% 20% 10% 0% Strongly agree Agree Neither agree or Disagree Strongly disagree disagree

Figure 3.6: Survey Questions (Survey Question D2)

#### 3.2 Summary

- A total of 94 responses to the on-line survey were received with most respondents identifying their involvement in the Programme as a departmental or agency officer, with project leader the second most common indentified category.
- There was a low response rate from respondents who identified themselves as local government representatives, and no responses from Traditional Owners. There may be opportunities to broaden knowledge of, and involvement in, the Programme by local government officers and Traditional Owners.
- There was a clear and positive indication that the majority of respondents believe the Programme will result "in long-term benefits to the sustainable use, management, conservation and protection of Queensland wetlands".



- The majority of respondents also chose to either "Strongly agree" or "Agree" that the Programme has produced quality products and outcomes to improve wetlands management.
- Generally, the greater the level of involvement a respondent has had with the Programme, the more likely that respondent is to view the Programme in a positive light.
- In relation to the survey itself, a majority of respondents were able to easily access the website and complete the survey on-line. Most respondents also chose to "Agree" that the survey questions targeted information relevant to evaluate the performance and outcomes of the Programme. A few participants considered the survey limited their ability to provide adequate feedback on the Programme and particular projects, and that it was too repetitive.



# 4 Improving the Wetland Information Base

A major focus of the Queensland Wetlands Programme (QWP) has been to improve the wetlands information base (Focus Area 1). The general lack of quality information on Queensland wetlands, and limited accessibility to information, have been major barriers to improving wetland management and protection in the past. The intended output from Focus Area 1 was: "Consistent methodologies and comprehensive assessment and identification of wetlands, their ongoing monitoring and data storage" (EPA 2005).

This chapter introduces the fourteen Focus Area 1 projects and provides a brief project description. Section 4.2 provides an evaluation of the focus area projects in relation to their overall efficiency and effectiveness, and highlights significant achievements and challenges. Key issues relating to the Focus Area 1 projects are discussed in Section 4.3.

### 4.1 Focus Area 1 wetland information base projects

Fourteen Queensland Natural Heritage Trust Wetlands Programme (QNHTWP) funded projects have been undertaken in this focus area. Each project shares the broad objectives of improving the wetland information and knowledge base, and improving stakeholders' accessibility to such information. Table 4.1 identifies each project and provides a brief description.

Table 4.1: Summary of Focus Area 1 wetland information base projects

Project Code	Project Title	Project Description
WL DPI 01	Improving Wetland Management in Agricultural Systems	This project was designed to integrate wetland management considerations into existing industry Farm Management System programs and develop Grazing Land Management (GLM) tools for land managers to manage wetlands in a sustainable and productive manner. The project involved three sub-projects:  Coastal Intensive GLM program  GLM for Floodplain and Channel Country, and  FMS Wetlands Integration.
WL EPA 01	Map and Classify Queensland Wetlands and the Provision of a Wetlands Inventory Database	This project was designed to map and classify Queensland's wetlands at appropriate scales and with sufficient detail to assist with the management of wetlands; develop a Wetlands Inventory Database which will compile available information describing the characteristics of wetlands; and provide wetland information to stakeholders in a variety of different formats (this resulted in Wetland $Info-a$ "first-stop-shop" for wetland information on the web).



Project Code	Project Title	Project Description
WL EPA 06	Development of the Wetlands Information Capture Component	This project sought to capture and integrate new and existing information from various sources, including existing flora and fauna databases, field survey data and new wetland information. The project involved two sub-projects:
		Wetlands Information Capture and Database Integration, and
		Development of specifications for field survey data capture.
WL EPA 08	Map Service and Data Download Website	This project aimed to develop applications to allow Wetland <i>Info</i> users access to wetland mapping, enable spatial wetland data to be downloaded, and deliver wetland mapping to Information Queensland and other users.
EPA WL 12	Traditional Owner Wetland Mapping of Values	This project sought to improve existing levels of understanding of Traditional Owners' values and knowledge of wetlands.
EPA WL 13	Updating Queensland's Wetlands Mapping and Classification	The first Queensland mapping and classification project (WL EPA 01) produced mapping of wetland extent as at 2001. This project aimed to update the mapping to 2005, and monitor the change in wetland extent and type from 2001.
EPA WL 14	Wetland Science and Research Online	This project was aimed at making wetland science and research available to managers, decision makers and scientists via Wetland <i>Info</i> – a product of the first Queensland mapping and classification project (WL EPA 01). The project also sought to develop wetland conceptual models for each wetland type.
EPA WL 17	Queensland Wetland (palustrine and lacustrine) Indicators and Monitoring Tools	This project aimed to develop a comprehensive suite of wetland conceptual models and indicators for Palustrine and Lacustrine wetlands in Queensland.
EPA WL 18	Targeted collection of inventory data for wetlands in the Great Barrier Reef catchment	This project was designed to identify regions in the Great Barrier Reef that were missing wetland inventory data, and to then undertake data collection in these regions to address the gaps. The data collected would then be delivered through Wetland <i>Info</i> .
WL NRM 01	Understanding of Queensland's Wetlands: Information review and gap analysis	One of the first QWP projects, this project sought to conduct a review and gap analysis on the status of wetlands science and management to make information available to natural resource managers, regulators and other interest groups in both technical and plain English formats.
WL NRM 03	Soil Indicators of Wetlands: status, margins and history	This project aimed to conduct a pilot study on the use of soils information as a defensible indicator of wetland boundaries, status and history to support wetlands regulation and management in Queensland.
WL NRM 04	Scoping study for monitoring of wetlands extent and condition	This project sought to review relevant national and international literature on wetland condition and extent, and perform a scoping study to determine appropriate resource condition indicators and methodologies for wetlands monitoring.
WL NRM 06	Soil Indicators of Queensland Wetlands	This project was an extension of the 'Soil Indicators of Wetlands: status, margins and history' project (WL NRM 03), and was designed to build upon and advance the use of soil indicators as a tool to identify wetlands to support the management and regulation of wetlands.



Project Code	Project Title	Project Description
NRM WL 07	Planning Compendium Tool to support the retention and management of wetlands	This project sought to catalogue the existing legislation and planning instruments that are relevant to wetlands in Queensland, identify gaps and develop an integrated planning tool to support resource planners.

# 4.2 Evaluation of Focus Area 1 wetland information base projects

This section evaluates the efficiency and effectiveness of the Focus Area 1 wetlands information projects. Section 4.2.1 evaluates the projects in relation to project processes, project delivery and project administration. Section 4.2.2 evaluates the Focus Area 1 projects in terms of effectiveness and assesses whether the projects achieved their stated objectives and outputs. The overall effectiveness of the projects in achieving the broad objectives of the focus area, and significant achievements and limitations, are also discussed in this section, along with an assessment table for each project in this focus area.

#### 4.2.1 Efficiency of wetland information base projects

Most projects in Focus Area 1 were affected by delays at various stages of project approval, development and completion. The reasons for this were varied and are not necessarily an indicator of the short-comings of any project. The projects were granted extensions by the Taskforce to be completed later in 2008 or in early 2009.

Late project sign-off and contract finalisation (see Chapter 9 for further discussion of Programme governance and contractual arrangements) affected some projects, such as the Improving Wetland Management in Agricultural Systems project and Updating Queensland Mapping and Classification. The Queensland Wetland (palustrine and lacustrine) Indicators and Monitoring Tools project also started three months late due to a delay in receiving project funding.

Staffing and capacity constraints also affected the timing of some projects. For example, the Traditional Owner Wetlands Values project commenced late in 2007 due to delays in identifying a suitable project manager, while the Development of the Wetlands Information Capture Component project was also delayed due to high rates of contractor and staff turnover. Such problems being not uncommon in terms of adequately resourcing major information technology (IT) related projects.

Unanticipated complexity or difficulty with the work undertaken affected other projects. For example, the Map and Classify Queensland Wetlands and the Provision of a Wetlands Inventory Database project (the Mapping and



Classification project) experienced delays as the mapping of wetlands in some areas of Queensland proved more complex than originally anticipated, with some difficulty experienced in sourcing digitised 1:100,000 topographical coverage. For some regional NRM bodies, the delays were a barrier to including wetlands in regional NRM planning and regional investment strategy development (DNRW 2007, p. 78).

The need for a high degree of project integration amongst Focus Area 1 projects (discussed in more in detail in section 4.3.1), meant that a delay in one project could result in delays in related projects. For example, the development of wetland conceptual models, a major output under the Wetland Science and Research Online project, was dependent on the outputs of the project the Scoping Study for Monitoring Wetland Extent and Condition, namely a wetland typology. However, the classification system was only partially complete at the time the conceptual models were being developed. Consequently, the Wetlands Science and Research Online project officer was required to complete the classification system in order to allow for the development of the conceptual models. As a result, the conceptual models were delayed by almost four months (EPA 2007, p. 55).

Unforeseen positive effects of the Programme's success in engaging stakeholders also caused delays in one project. The Improving Wetland Management in Agricultural Systems project experienced a delay in the development of the Grazing Land Management (GLM) module for the western and northern catchments, as demand for a GLM workshop was much greater than anticipated. While resources were needed to be diverted from the GLM module to the workshop to meet stakeholder demand, this was an indication that the workshops were highly valued by stakeholders.

As the Programme comes to the end of 2008, some Focus Area 1 projects will not be completed by the December 2008 deadline. For example, the Updated Mapping and Traditional Owner Wetland Values will be completed in early 2009.

#### 4.2.2 Effectiveness of wetland information base projects

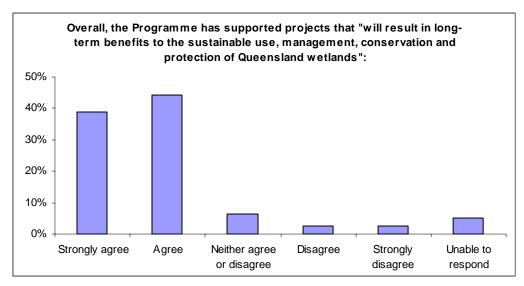
One of the underlying drivers for the establishment of the Programme was a recognition that a significant gap existed in Queensland's wetland information base. The information base was insufficient to appropriately inform and drive policy development and planning in relation to wetland management and conservation. This was either due to the information not existing in the first place, or if the information did exist, there was inadequate awareness and understanding of that information, that is a lack of wetland knowledge.



While some Focus Area 1 projects are still to be completed, it is clear that significant progress has been made in improving the wetlands information and knowledge base, and developing a 'first-stop-shop' for accessing such information (through Wetland *Info*). This is supported by the findings from the evaluation survey (see Figure 4.1), where a clear majority of respondents chose to "Strongly agree" or "Agree" with the statement "the Programme has improved the wetlands information base". The accessibility of information on Queensland wetlands on Wetland *Info*, and awareness of what information is available could be addressed further (see Chapter 8).

Some stakeholders would like to see more practical information to inform wetland management, especially for on-ground works building on the FMS, DSS and Rehabilitation Guidelines. For example, stakeholders involved with the GBR Pilot Programme and on-ground works suggested that "To manage a wetland well, you only need a bit of information about where it is, but a whole lot of information on ecological processes". A conservation group stakeholder observed that "if the information obtained [wetland mapping and inventory] is used to inform and develop regulatory framework, then this would be a good long-term outcome". These perspectives highlight different views on state-wide mapping depending on user requirements and roles (also see regional NRM group perspectives below).

Figure 4.1: Has the Programme improved the wetlands information base? (Survey Question B6)



Significant Focus Area 1 achievements include:

• development of a wetlands mapping and classification methodology



#### A perspective

"The map server and data download was very effective and a completely new form of delivery of information that the EPA had not used before"

Departmental Officer

- the mapping and classification of wetlands on a state-wide basis (and the progress made on updating the wetland mapping)
- providing for the mapping and other inventory data to be available on-line
- the development of GLM and FMS wetland modules
- the development of an online 'first-stop-shop' for wetlands information at WetlandInfo
- development of a wetlands typology for lacustrine and palustrine wetlands
- development of conceptual models for tropical and sub-tropical wetlands, and
- the groundbreaking work achieved on hydromorphic soil indicators for wetlands.

The Mapping and Classification project was one of the largest projects undertaken in Focus Area 1 (and in the QWP), and required significant resources (some \$2.28 million). It is also the largest wetlands mapping project undertaken in Australia. For these reasons, it is important to pay particular attention to this specific project.

### A perspective

The mapping was an "excellent piece of work. Had rigour and was well structured – a constraints mapping approach"

Industry Peak Body Participant A key objective of the Mapping and Classification project was to map and classify Queensland's wetlands at appropriate scales and with sufficient detail to help with the management of wetlands. The project is close to finalisation and has successfully produced wetland mapping (in an updateable format) of most of Queensland to a scale of 1:100,000 for inland areas (greater than 5 hectares), and 1:50,000 for coastal areas (greater than 1 hectare). The mapping is available in several formats including on-line Wetland Maps, DVDs, summary information and PDF's.

One of the major outcomes of the Mapping and Classification project was the development of a peer reviewed mapping and classification methodology which is available on the web. This methodology was a major achievement and involved several case studies.

Considerable effort and commitment was placed into stakeholder engagement, with a number of surveys, workshops and briefings. The mapping has been reviewed by "regional experts", and 12 expert reviews of the mapping have been held to date. The mapping has also been provided to landholders for comment (see Section 4.3.3 for further discussion on consultation, engagement and communication).

The mapping will provide Queensland with the most up to date wetland mapping at a state-wide scale in Australia. A major focus of the Mapping and Classification



#### A perspective

"The mapping methodology and protocols are really useful"

Interstate Departmental Officer project was to ensure it was complimentary with other state and national NRM datasets. For example, the development of the mapping methodology incorporated existing national and state data standards. Additionally, the mapping coverage dataset was also developed to conform to existing national and state standards. Interstate departmental officers have highlighted the value of the mapping methodologies, protocols and classification systems and suggested that the "mapping protocols are universal and could be adopted nationally".

In May 2007, the JSC noted the suggestion from the Joint Taskforce that, in taking forward NHT3 investment (subsequently replaced by *Caring for our Country*), the JSC "is to ensure that all activities involving Wetlands data and information collection are consistent with the QWP Wetlands information capture project managed by the EPA".<sup>4</sup>

Australia's 2008 national report on the implementation of the Ramsar Convention identified that an Australian Wetland Inventory and Mapping Project is underway. The national report identified that comprehensive mapping of wetlands, which is a first step in inventory, has been (Australian Government 2008):

"... substantially progressed in Queensland under the Queensland Wetlands Programme". This will provide a model of wetland mapping protocols and approaches for potential application in other jurisdictions".

While a valuable national, state-wide and regional resource, some NRM groups and local councils have questioned the regional and local useability of the mapping. While the mapping has been developed to the scale identified in the project proposal, it has been suggested that the scale of mapping required to inform local government planning and management is in the order of 1:25,000 or even 1:10,000, particularly for urban and peri-urban areas subject to intensive development. However, the cost and resources required to map to this scale across Queensland would be significant and clear objectives would be required before this mapping could be undertaken.

Several regional bodies had planned to develop their own wetlands mapping at the time of the Mapping and Classification project. However, these bodies were deterred by the EPA from undertaking such mapping until the EPA mapping had been completed (DNRW 2007, p. 78). The EPA's reasoning was to maintain a consistent, state-wide approach and methodology across Queensland. The intent

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<sup>&</sup>lt;sup>4</sup> Minutes of JSC meeting, 24-25 May 2007.



was always to allow further fine scale mapping by other organisations once the QWP mapping was complete (in line with a consistent methodology). The broader scale used in EPA's wetland mapping, in combination with advice to pause their own regional mapping activities, has led to a degree of frustration being expressed by some regional NRM body representatives.

An on-going challenge exists to maintain mapping and accommodate changes, such as that potentially caused by land use change and climate change. Ground-truthing has already been identified by the EPA as a priority, and this will need to be addressed in high value and at risk wetland areas to ensure accurate mapping and stakeholder support for mapping products and use of mapping information (for example, to inform any regulatory response – see Chapter 5).

#### A perspective

There is "very comprehensive data available on Wetland*Info* – very effective"

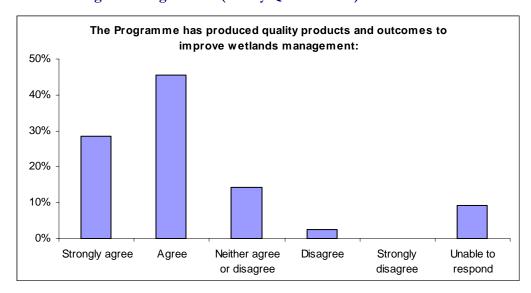
Conservation Group Participant As identified above, another major achievement is the development of Wetland Info - an online 'first-stop-shop' for wetland information in Queensland released in October 2007. Wetland Info was not initially identified as an explicit project or output of the Programme, but it evolved in response to stakeholder needs, and is an example of adaptive management. Clarification of the target audience and improvement of the navigability of the website will further enhance the value of Wetland Info. These issues are expanded on in Chapter 8.

Results indicate that, due to the QWP, decision-makers now have more access to information on wetlands than previously. This is supported by the findings from the evaluation survey (see Figure 4.2), where a majority of respondents chose to "Strongly agree" or "Agree" with the statement 'Wetlands information has become more accessible to decision-makers through the Programme'. Mapping and other information on Wetland *Info* would appear to have made a strong contribution to this outcome.

A considerable amount of stakeholder engagement was undertaken as part of the Mapping and Classification project and indeed as part of other Focus Area 1 projects. Through this engagement, a need for an easily accessible 'first-stop-shop' for wetland information was identified and prioritised by stakeholders. Consequently, information collected through the Programme has been made available on Wetland *Info*, including mapping and classification information, scientific and research related information, and wetland management and conservation information.



Figure 4.2: Has wetland information become more accessible to decision-makers through the Programme? (Survey Questions B5)



The integration of wetland management into the existing industry Farm Management Systems framework (sub-project of the Improving Wetland Management in Agricultural Systems project) was seen as a particularly good example of adaptive management by industry peak bodies. The project was able to incorporate a wetland management module into an existing industry framework.

The Planning Compendium is a general guide to legislation and was requested as part of stakeholder consultation. The guide will be made available through Wetland Info. The level of information in the guide has had to be kept at a broad level as identifying specific parts of legislation could be seen as providing legal advice and pose an unacceptable legal risk. While aimed at a broad audience (e.g. local government officers, policy officers, landholders, regional NRM bodies and developers), some departmental stakeholders considered this project to be of less value compared to others. It may not provide the required depth of information and it will need to be actively maintained – which was identified from the beginning of the project.

The following table (see Table 4.2) provides an outline of the stated objectives and outputs of each project in Focus Area 1, with a brief assessment or status report on whether each project achieved the stated objectives and outputs.



Table 4.2: Assessment of Focus Area 1 projects against stated objectives and outputs

Project Title	Project Objectives	Project Outputs	Assessment and/or Status
Improving Wetland Management in Agricultural Systems	To integrate wetland management considerations into industry Farm Management Systems (FMS) programs and develop tools for land managers to manage wetlands in a sustainable and productive manner.	Project had three distinct outputs:  Coastal Intensive GLM module GLM for Floodplain and Channel Country FMS Wetlands Integration	Project is largely successfully completed, with the Coastal Intensive GLM module completed and the GLM for Floodplain and Channel Country being published. FMS Wetlands Integration is almost complete, with the overall project expected to be completed by the extended date of December 2008.
Map and Classify Queensland Wetlands and the Provision of a Wetlands Inventory Database	The objectives of the project are to map and classify Queensland's wetlands at appropriate scales and with sufficient detail to help with the management of wetlands; Develop a Wetlands Inventory Database which will compile available information describing the characteristics of wetlands; and provide wetland information to stakeholders in a variety of different formats.	Project had two distinct stated outputs:  • Mapping and classification of wetlands in Queensland, and • Wetland Inventory Database.  The project also resulted in the development and completion of Wetland Info.	The project has successfully completed mapping of all of Queensland to a scale of 1:100,000 for inland areas, and 1:50,000 for coastal areas. Mapping is being progressively released including on Wetland Maps. A wetland inventory database has been completed, and made available on Wetland Info, which was successfully launched as a "first-stop-shop" for wetland information. The project is almost complete, and expected to meet its extended deadline of December 2008.
Development of the Wetlands Information Capture Component	The objectives of this project were to capture and integrate new and existing information from various sources, including existing flora and fauna databases, field survey data and new wetland information into the wetlands inventory database.	The project involved two distinct outputs:  • Wetlands Information Capture System available via WetlandInfo, and • Development of specifications for field survey data capture	The project is being completed by December 2008. The webbased Wetland Information Capture System (WIC) has been developed and is being trialled. This system will be an integrated part of the Wetland Info website and allows external clients (such as regional bodies) to upload and manage on-ground inventory information.
Map Service and Data Download Website	The objectives of this project were to develop applications to allow Wetland <i>Info</i> users access to wetland maps, enable spatial wetland data to be downloaded, and deliver wetland mapping to Information Queensland and other users.	The stated outputs of this project were a Wetland Internet Map Server and wetland spatial data available via Wetland <i>Info</i> .	The project is being completed but users of Wetland <i>Info</i> can access wetland maps and spatial data. The project has largely been successful in meeting stated objectives and outputs. The project deadline is December 2008.
Traditional Owner Wetland Mapping of Values	The objective of this project was to improve existing levels of understanding of Traditional Owners' values and knowledge of wetlands.	The key stated output of this project was the spatial mapping of Traditional Owners wetland values.	The project is expected to be completed in early 2009.



Project Title	Project Objectives	Project Outputs	Assessment and/or Status
Updating Queensland's Wetlands Mapping and Classification	The objectives of this project were to develop methodologies for updating the existing wetland mapping from 2001 to 2005 and future updates, making the updated mapping available to a range of stakeholders and monitor the change in extent of wetlands and type from 2001.	The key stated outputs of this project were:  Updated wetland maps Methodology for updating mapping that will facilitate monitoring of wetland extent Methodology for updating estuarine wetlands mapping Report on wetlands extent and condition change from 2001 to 2005.	The project is expected to be completed in early 2009. Considerable progress has been reporting with regard to updating mapping to 2005, and the methodology for updating estuarine wetlands mapping has been completed.
Wetland Science and Research Online	The objectives of the project were to make wetland science and research available to managers, decision makers and scientists via Wetland <i>Info</i> , and to synthesise wetland science into conceptual models that communicate wetlands information to stakeholders.	The overall project output is the science and research component of the Wetland Info website, which will include regional scale wetland conceptual models and links to scientific reports and access to current research providers and programs.	The project is expected to be completed in early 2009. The conceptual models will inform understanding of how wetlands function.
Queensland Wetland (palustrine and lacustrine) Indicators and Monitoring Tools	The objectives of this project were to develop a comprehensive suite of wetland conceptual models and indicators for Palustrine and Lacustrine wetlands in Queensland and develop a framework which will allow for wetland indicators and monitoring effort to be integrated into an overall wetlands condition outcome.	The stated project outputs are:  Comprehensive set of wetland monitoring conceptual models and indicators  Comprehensive set of indicator protocols and methodologies  Wetland monitoring indicator report, and  Wetland Monitoring Integration Framework	The project outputs have been achieved and the project is expected to be completed in late 2008.
Targeted collection of inventory data for wetlands in the Great Barrier Reef catchment	Project objectives were to identify regions in the Great Barrier Reef that are missing wetland inventory data, and then undertake data collection in these regions to address the gaps. The data collected would then be delivered through Wetland Info.	Project outputs include the identification and prioritisation of regions in the Great Barrier Reef that require additional inventory data collection and the delivery of this inventory data through Wetland <i>Info</i> .	The project is expected to be completed in late 2008.
Understanding of Queensland's Wetlands: Information review and gap analysis	To scope and document research, scientific information and corporate knowledge on the understanding of wetland functions and values.	The major output of the project includes a report of the information review and gap analysis including regional perspectives and recommendations on priority gaps.	The project was completed in 2006, with a Final Project Report produced in July 2007. All objectives and outputs of the project were successfully achieved according to the report.



Project Title	Project Objectives	Project Outputs	Assessment and/or Status
Soil Indicators of Wetlands: status, margins and history	The project aimed to conduct a pilot study on the use of soils information as a defensible indicator of wetland boundaries, status and history to support wetlands regulation and management in Queensland.	The outputs of the project include a literature review on wetland soils in Australia, a report on the case study and a project report with recommendations for further work.	The project was completed in 2007 with a Final Project Report completed in June 2007. All stated objectives and outputs were achieved.
Scoping study for monitoring of wetlands extent and condition	Project objectives were a review of relevant national and international literature on wetland condition and extent, and perform a scoping study to determine appropriate resource condition indicators and methodologies for wetlands monitoring.	The stated project outputs were a scoping study including recommendations on indicators and methodologies monitoring wetland resource condition and extent, a consultant's report on expert panel workshop, and a report to the Wetland and Waterbirds Taskforce on recommended indicators.	The project was completed in 2007 with a Final Project Report completed in September 2007. All stated objectives and outputs were achieved.
Soil Indicators of Queensland Wetlands	The objectives of this project were to refine the knowledge and understanding of soil hydromorphic indicators for wetlands, advance the use of soil morphology as a tool to identify wetlands, and develop a guideline for both simple field assessment and comprehensive assessment.	The major stated output of this project is a technical report detailing Queensland soil indicators of wetland status, and guidelines to support government, regional bodies and other resource managers when using soil indicators.	Outputs have been achieved and the project is expected to be completed in late 2008.
Planning Compendium Tool to support the retention and management of wetlands	Project sought to catalogue the existing legislation and planning instruments that are relevant to wetlands in Queensland, identify gaps and develop an integrated, webbased planning tool to support resource planners.	The major stated output of this project is the development of a functional tool to assist resource planners gain access to relevant legislation, policies and strategies that underpin the conservation and protection of wetlands in Queensland, and to be made available on Wetland Info.	The project is expected to be completed in late 2008. The project has largely completed the stated objectives and outputs of the project. The project will be made available on the Wetland <i>Info</i> site.

# 4.3 Key Issues

This section considers several issues arising from the Focus Area 1 projects in terms of integration, consultation, engagement and communication.

# 4.3.1 Integration with QWP Projects and other initiatives

Overall, the nature of the objectives of Focus Area 1 projects, and the approach taken by the QWP Programme Manager and project officers, has ensured there has been a high degree of project integration with related projects and other government and industry initiatives. Findings and outcomes from earlier projects and stakeholder engagement (such as, the Mapping and Classification project and the Information Review and Gap Analysis project) have informed the



development and implementation of later projects. Another example of project integration is illustrated by project outputs being delivered and/or made available through Wetland *Info* – the most high profile outputs being the wetland mapping and classification information.

Some projects were the direct continuation of an earlier project, such as the Updated Mapping and Classification project which was designed to develop methodologies for updating the existing wetland mapping from 2001 to 2005 and provide future updates, thereby providing a mechanism for monitoring wetland extent changes. The Soil Indicators of Queensland Wetlands project was also a continuation and extension of an earlier project, Soil Indicators of Wetlands: status, margins and history.

Other projects within the focus area tie in closely to several projects, such as the targeted collection of inventory data for wetlands in the Great Barrier Reef catchment project. This particular project used the data capture proforma developed under the Wetlands Information Capture Component project to the inventory data and input it into the wetland information databases. The inventory data will then be made available to the public, including regional and community bodies, through Wetland Info.

As noted under Section 4.2.1, when projects have a high degree of interdependence, issues can arise should one project be delayed. This can cause delays with the release of information and products resulting from the various projects.

#### 4.3.2 Consultation, engagement and communication processes

Overall, projects within this focus area demonstrated a strong commitment to stakeholder consultation, engagement and communication.

The Mapping and Classification project, in particular, demonstrated a commitment to stakeholder consultation and engagement. In developing the wetlands inventory database and Wetland Info website, a web-based questionnaire was developed to assess stakeholder and user requirements, with over 70 responses received. In addition to the survey, over 30 stakeholder workshops and briefings were held with regional NRM groups and other parties to assess stakeholder needs for the wetlands inventory database and Wetland Info. A later consultation process was also held to identify high-level user requirements for Wetland Info and provide stakeholders with information relating to the mapping products. In this instance over 170 questionnaires were returned and 18 workshops held in Brisbane and regional centres through Queensland. The use of regional expert review and active canvassing of feedback has also informed the mapping project.



Although the commitment to stakeholder engagement was evident, this evaluation highlights the importance of establishing and reaffirming a common understanding of what is being undertaken and what is not. Despite the high level of stakeholder consultation and engagement that was undertaken through the QWP, issues with the scale of mapping have been raised by some stakeholders. This highlights, as noted by an industry peak body, the importance of "establishing mutually agreed outcomes" between government and stakeholders. The feedback from some regional NRM bodies and local councils also highlight that further local and regional level mapping will be required in sensitive and high risk areas. This may well be beyond the scope of the QWP or any successor and would be addressed at the local or regional level.

The Improving Wetland Management in Agricultural Systems project was mentioned specifically by two industry peak bodies as having excellent consultation, engagement and communication processes. The project involved regular one-on-one communication ensuring "there were no surprises". There were regular opportunities to review project material resulting in a consultation and engagement process that was "very good". The quality and practicality of the work produced by the Improving Wetland Management in Agricultural Systems project was also seen to be particularly good.

The test for both the Farm Management System and Grazing Land Management module (see Chapter 7) will be in the application. It has been suggested by a NRM stakeholder that both industry farm management tools will still require "a high level of expertise to identify locally-relevant parts for use in specific wetland situations". Queensland Department of Primary Industries and Fisheries (DPI&F) extension officers and agricultural advisors will require sufficient wetland knowledge to be able to best advise how to improve wetland management.

In some instances, projects resulted from stakeholder consultation undertaken by earlier projects. For example, the Traditional Owner Wetland Values project is the direct result of the extensive stakeholder consultation undertaken for the Mapping and Classification project. The consultation in that instance demonstrated the need for a project to investigate Traditional Owner values in relation to wetlands. More work is still required in this broad area (see chapter 11).

The remaining requirement for many of the Focus Area 1 projects will be to ensure that information available from the projects is disseminated and communicated to regional departmental staff, NRM bodies, conservation groups and landowners (i.e. that information is provided to land managers and wetlands experts working at the "coal face").



### 4.4 Overall Contribution to the Programme

The following section briefly discusses the overall contribution of Focus Area 1 to the Programme in relation to the identified outputs in the MER Strategy (EPA 2005).

#### How has this project improved the wetland information base?

While many Focus Area 1 projects are still being completed, it is clear that much has been achieved by way of improving the wetlands information and knowledge base and developing a 'first-stop-shop' for accessing such information. Advancements have been made in achieving the broad objective of improving the wetland information base, such as the mapping and classification of wetlands on a state-wide basis, and the development of an online 'first-stop-shop' for wetlands information at Wetland *Info* including on-line mapping. Examples of other major project achievements include the development of conceptual models for tropical and sub-tropical wetlands, and development of the hydromorphic soil indicators. The development of the GLM modules and the integration of wetland management into Farm Management Systems will provide valuable guidance for land managers but care will be required with application.

# How are stakeholders (community, government, industry) more informed about wetlands?

The development of Wetland Info, an online 'first-stop-shop' for wetland information in Queensland, was a significant achievement in informing stakeholders about wetlands. Wetland Info contains a considerable amount of information that has been collected through the Programme, including mapping and classification information, scientific and research related information, and wetlands management and conservation information. It has integrated existing wetland information from other sources. Stakeholders are also more informed about wetlands due to the strong commitment to stakeholder consultation, engagement and communication, which was particularly evident in the Mapping and Classification and the Improving Wetland Management in Agricultural Systems projects.

# How has the project contributed to extending the knowledge base on wetlands?<sup>5</sup>

As outlined above, much has been achieved by way of improving the wetlands information and knowledge base and developing Wetland *Info* as a 'first-stop-shop'

<sup>&</sup>lt;sup>5</sup> For the purposes of this evaluation, information was considered as the documentation, recording and storage of data on wetlands. Knowledge was viewed as the understanding, use and access of information on wetlands.



for accessing such information. Additionally, Wetland *Info* and wetland mapping consultation included stakeholder workshops to inform stakeholders about wetlands, the QWP, wetlands mapping and the development of Wetland *Info*. Eighteen QWP project fact sheets were also developed to assist in explaining project products and their contribution to better understanding of wetlands.

# How has the information gained in these projects assisted in expanding the scope of projects under other Focus Areas?

Overall, the nature of the objectives of Focus Area 1 projects, and the approach taken by the QWP Programme Manager and project officers, has ensured there has been a high degree of project integration with related projects and other government and industry initiatives. Findings and outcomes from earlier projects and stakeholder engagement (such as the Mapping and Classification project and the Information Review and Gap Analysis project) were used to inform the development and implementation of later projects.

#### How has the information been made more accessible to decision makers?

Information has been made more accessible to decision makers through the development of Wetland *Info*, an online 'first-stop-shop' for wetland information in Queensland that was released in October 2007.

# How has it been stored so it is more conducive to be complimentary to other State and National NRM datasets?

The mapping and classification data developed under the Mapping and Classification project took considerable effort to ensure it was complimentary with other state and national NRM datasets. For example, the development of the mapping methodology incorporated existing national and state data standards. Additionally, the mapping coverage dataset was also developed to conform to existing national and state standards.

### 4.5 Summary

- Although some Focus Area 1 projects are still being completed, it is clear that
  much has been achieved by way of improving the wetlands information and
  knowledge base and improving access to wetlands information.
- The Mapping and Classification project is close to finalisation and has successfully produced wetland mapping (in an updateable format) for most of Queensland to a scale of 1:100,000 for inland areas, and 1:50,000 for coastal areas.



- Other significant achievements included the development of the GLM module and integration of wetland management into Farm Management Systems, the development of conceptual models for tropical and sub-tropical wetlands, and development of hydromorphic soil indicators for wetlands.
- Wetland *Info*, an online 'first-stop-shop' for wetland information in Queensland was released in October 2007 and provides an innovative 'first-stop-shop' for wetland information.
- Some stakeholders have questioned the accessibility and useability of Wetland *Info* and the practicality of the website as a wetlands management tool. However, the website can be augmented and added to in the future with different access points and information for different users.
- A majority of Focus Area 1 projects experienced delays at various stages of project approval, development and completion, with these delays resulted in many project milestones and products being delivered late. Most projects did not meet the 30 June 2008 deadline, with these project being granted extensions until either September or December 2008.
- Projects within Focus Area 1 demonstrated a significant commitment to stakeholder consultation, engagement and communication. Further engagement would have been useful to continue to promote a common understanding of project objectives and outcomes.
- The scale and useability of the QWP mapping is an issue for some regional NRM bodies and local governments, and there is some frustration amongst regional NRM bodies about the timing of the wetland mapping products. A priority will be to review state, regional and local mapping requirements to assess if further work is necessary and for what purpose.



# 5 Wetland Planning Arrangements

This Chapter evaluates the performance of Focus Area 2 – Wetland Planning Arrangements and related projects.

#### 5.1 Introduction

The intended output from Focus Area 2 is "natural resource planning and cohesive planning arrangements to protect, conserve and manage wetlands" (EPA 2005). This reflects the overarching goal of the Queensland Natural Heritage Trust Wetlands Programme (QNHTWP).

As identified in Chapter 1, the QNHTWP was established in 2004 to deliver the extension of the Natural Heritage Trust to support Queensland in meetings its obligations under Clause 24 of the Bilateral Agreement:

"Within three years of signing this Agreement the State agrees to develop and implement new statutory planning and development assessment arrangements to protect wetlands" (Commonwealth of Australia and the State of Queensland 2004).

Two broad sets of projects have been or are being undertaken through the Queensland Wetlands Programme (QWP) to support the development of a regulatory framework to protect wetlands:

- Wetlands mapping, definition and classification projects to underpin regulation of activities affecting wetlands and also be used for multiple outcomes and uses (see chapter 4).
- Regulation-specific projects a series of eight projects undertaken to provide specific information and analysis to enable the development of the regulatory framework. These projects include wetlands management guidelines, mapping connectivity of natural wetlands, ecological character description, wetlands prioritisation and regulatory impact analysis (see Table 5.1).

Table 5.1: Summary of Focus Area 2 planning arrangements projects

Project Code	Project Title (with short name used in this report in bold)	Project Description
WL EPA 03	Preparation of a report and three case studies on the impact of the proposed regulatory regime for the conservation of Queensland wetlands Regulatory regime case studies	Three socio-economic-environmental case studies on the impact of the proposed regulatory regime on the community. The case studies focus on the effectiveness of high-risk earthwork activities conducted by the extensive agricultural sector, intensive agricultural sector, and tourism and development sectors respectively.



Project Code	Project Title (with short name used in this report in bold)	Project Description
WL EPA 04	A method for identifying and mapping ecological, including hydrological, connectivity of natural wetlands  Wetlands connectivity – stage 1	Support the wetlands regulatory regime by providing a methodology for identifying and mapping ecological and hydrological connectivity of natural wetlands. Understanding of connective values of natural wetlands will assist in determining which high-risk activities may adversely impact on this connectivity.
WL EPA 05	Critical wetland support guidelines  Critical guidelines	Development of supporting tools to assist wetland managers and assessors: a toolbox to describe currently available assessment tools; a guideline on how to apply the definition of a wetland; and a guideline on the use of buffers to minimise adverse impacts on wetlands.
EPA WL 09	Wetland prioritisation for regulatory framework GBR catchments  Rapid AquaBAMM assessment	Rapid application of the Aquatic Biodiversity Assessment and Mapping Method (AquaBAMM) to assess the conservation values of natural wetlands in 35 GBR catchments.
EPA WL 10	Addressing connectivity for the purpose of a regulatory framework  Wetlands connectivity – stage 2	Application of methodology developed in stage 1, to map the connectivity of Queensland's natural wetlands.
EPA WL 11	Additional support for finalisation of the regulatory framework  Additional support for regulatory framework	Implementation of a comprehensive and adequate regulatory framework for wetland protection in Queensland. Steps include: identifying activities to be permitted, controlled/assessed and prohibited in wetlands and buffers; identifying and developing regulatory options; incorporating AquaBAMM identification and mapping into regulations; conducting a RIS and seeking cross-agency endorsement.
EPA WL 15	Scoping and development of a method for the ecological characterisation of dry tropical wetlands  Ecological characterisation method	Development of a methodology to allow for ecological characterisation of wetland types and at a regional scale, including limnological processes, connectivities, multi-scalar assessments (spatial and temporal) and end-user requirements. The ecological character description of wetlands gives a baseline description of the wetland at a given point of time.
EPA WL 16	Ecological character description of two Ramsar sites in Queensland Ecological character description	Application of the method to two Ramsar sites, to support site managers to maintain these sites and to assist the Queensland and Australian Governments to meet the requirements of the Ramsar Convention and the EPBC Act 1999.

Although five years has passed since the signing of the Bilateral, the full regulatory framework has yet to be implemented, and there has only been inter-agency consultation on a potential regulatory framework. However, on 28 October 2008 the Hon. Anna Bligh, Premier, announced Queensland Government's continued commitment to develop regulations to prevent agricultural water pollution in Great Barrier Reef catchment (Bligh 2008):

"... The regulatory model is at an early stage of development, but today I can announce that we will aim to put into law... Protection and rehabilitation of wetlands and riverside vegetation including limiting activities within and around those areas known to have an impact on their values.' [emphasis added]



At this stage of regulatory development, and with limited information available about the outputs or outcomes of specific projects because of Cabinet processes and confidentiality, it is difficult to comprehensively evaluate the effectiveness of some of the Focus Area 2 projects in Table 5.1. This chapter therefore primarily focuses on evaluating timing, consultation, and other issues raised by Programme stakeholders.

# Evaluation of Focus Area 2 planning arrangements projects

### Efficiency of planning arrangements projects

Under the Bilateral Agreement, the Queensland Government committed to develop and implement a regulatory framework by June 2007. The QNHTWP was established under the Bilateral to support the development of "new statutory planning and development assessment arrangements to protect wetlands" (The State of Queensland and the Commonwealth Government 2004). A departmental officer has observed that the Programme could support the development of the regulatory regime, but the ultimate delivery of the regulatory regime is the responsibility of the Queensland Government.

## A perspective

5.2

5.2.1

"The lack of a regulatory framework is the gorilla in the corner of the room"

Departmental Officer

As discussed in section 5.1, the delivery of a regulatory framework is critical to ensuring long-term sustainable management of Queensland's wetlands. There is limited documentation of the reasons for delays for the regulatory regime, which ultimately impacted on the delivery of the regulatory projects. However, Programme annual reports and interviews with project managers and departmental officers highlighted several issues, including:

- Completion of the regulatory regime case studies was dependant on a proposed wetlands regulatory regime being determined by the Queensland Government. As both were bound by Government processes and variable timeframes, no definitive timing for associated milestones could be set or guaranteed (EPA 2008, p. 52).
- Preliminary prioritisation of wetlands in the GBR catchment as part of the
  additional support for the regulatory framework project indicated that full
  prioritisation was required in order to provide input into the regulatory
  framework. In addition, "the regulatory impact statement could not be
  completed until cross-agency approval was achieved". A risk associated with
  the project was "non-endorsement of the proposed planning and development
  regime by other agencies" (EPA 2008, p. 59).
- The commencement of many QWP projects were delayed by several months due to time required to gain cross-agency approval and establish contracts. Different stakeholders attributed delays to various aspects of both Queensland



Government and Australian Government processes (project approval and administration processes are discussed in more detail in chapter 9).

Although some Focus Area 2 projects were delayed, the Taskforce supported extensions and more time to ensure quality products, for example, with development of the Critical Support Guidelines. As discussed further in chapter 9, it is not evident that clear lines of authority and responsibility were available to enable the Taskforce to deal appropriately with delays and expedite the development of regulations.

# 5.2.2 Effectiveness of planning arrangements projects

The effectiveness of individual Focus Area 2 projects is summarised in Table 5.2. This evaluation is partial, because the majority of projects are not complete.

Table 5.2: Assessment of Focus Area Two projects against stated objectives and outputs

Project Title	Project Objectives	Project Outputs	Assessment and/or Status
Regulatory	Preparation of a report and	To develop a report and three	Not yet completed. As this project
regime case	three case studies on the impact	socio-economic-environmental	intends to assess, through case studies,
studies	of the proposed regulatory	case studies on the impact on	the socio-economic-environmental
	regime for the conservation of	the community of the	impact on the community of the
	Queensland wetlands.	proposed regulatory regime for	proposed regulatory regime, its
		the conservation of	completion is dependent on the
		Queensland wetlands and the	development of the regulatory regime.
		implications of the regulatory	
		regime across Queensland.	
Wetlands	To assist in finalising the policy	Not identified in project	Completed and a final report compiled
connectivity -	regime, this project will	proposal	in January 2007. Agreed steps in the
stage 1	reconcile the connectivity issues		methodology were completed by the
	from the regulatory regime case		consultant. Anticipated project
	studies project with other key		outcomes not fully achieved.
	policy elements, progress		
	mapping for selected case study		
	catchments to enable the		
	development of a regulatory		
	impact statement, and make		
	recommendations to complete		
	state-wide mapping of wetland		
	connectivity area.		





Project Title	Project Objectives	Project Outputs	Assessment and/or Status
Critical wetland	Develop support tools to assist	A toolbox of wetland	Not yet completed. The Assessment
Critical wetland support guidelines	wetland managers and assessors.  Three tools were identified as critical to supporting the objectives of the QWP:  A toolbox to describe currently available wetland assessment tools, across a range of scales and purposes;  A guideline on how to apply the definition of a wetland as used in the Wetland Programme;  A guideline on the use of buffers to minimise adverse	A toolbox of wetland assessment methods and guidelines for the definition of wetlands buffers and wetland buffers available online and in hardcopy.	Not yet completed. The Assessment Methods Toolbox was published online with the Wetland <i>Info</i> release in early 2008 and is available for use. Insufficient information to assess the guideline on applying the definition of a wetland although work done on wetland species for the definition guideline has been published on Wetland <i>Info</i> .
Wetland prioritisation (Rapid AquaBAMM assessment)	impacts on wetlands.  Prioritise mapped wetlands in the GBR catchments. This project applied a newly developed method of rapid assessment to identify the conservation values of all non-riverine freshwater wetlands in the GBR catchments of Queensland, and applied a full assessment in one GBR catchment to validate the rapid method.	1. Relative conservation values (Very High to Low) established for all mapped non-riverine freshwater wetlands in GBR catchments.  2. Validation of the rapid assessment method in one catchment.  3. Ecosystem function scores established for selected wetlands as determined by expert opinion and combined with conservation assessment scores.	Completed March 2008. The intended outcome of this project was to undertake rapid AquaBAMM assessment to prioritise mapped wetlands for conservation. The project findings revealed that rapid assessment is not sufficient, and that full assessment is required.
Wetlands connectivity – stage 2	To assist in finalising the policy regime, this project will reconcile the connectivity issues from the WL EPA 03 project with the other key policy elements, progress mapping for selected case study catchments to enable the development of a regulatory impact statement, and make recommendations to complete state-wide mapping of wetland connectivity area.	Not identified in project proposal.	Not yet completed. A project team was formed and terms of reference were developed for a consultancy that will identify how connectivity to wetlands can be addressed in development assessment. Project achievements not able to be fully evaluated.
Additional support for finalisation of the regulatory framework	To assist with the development of adequate legal protection of significant Queensland wetlands and consequent values such as waterway and reef health, where existing protection is deficient.	Implementation of a comprehensive and adequate regulatory framework for wetland protection in Queensland.	Not yet completed. Desktop analysis and the identification of activities and development of options 50 percent complete. The project is dependent on cross-agency approval of the regulatory framework.



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			management.	
9. Communication materials.			U	
10. Updated Ramsar				
Information Sheet.			·	
11. Ramsar site map				
reformatted to new national			T T	
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# Overall need for regulations to protect and rehabilitate wetlands

Several stakeholders expressed concern that current regulatory arrangements are not sufficient to protect or restore wetland values. Some expressed the opinion that a lack of regulation was a greater barrier to sustainable wetland management than lack of knowledge or information, despite the need for adequate wetland information to underpin a regulatory framework and the limited state of wetland data available before the programme started. While stakeholders acknowledged that the *Vegetation Management Act 1999* and *Integrated Planning Act 1997* (IPA) provided some regulatory protection for wetlands, there was some evidence of a lack of awareness of current regulatory protection for wetlands with one



stakeholder expressing a perception that IPA provided "next to no protection for permanent wetlands, and none whatsoever for ephemeral ones".

The Integrated Planning Act 1997 (IPA) appears to provide partial protection for wetlands. Under the IPA, urban developments within 100 m of an identified wetland are referred to the EPA. However, local government planning schemes can only address intensive landuse, and not broadacre agriculture. The Coastal Protection and Management Act 1995 and the Land Protection (Pest and Stock Route Management) Act 2002 also provide incomplete protection for wetlands. There is therefore an opportunity for a new wetland regulatory framework to fill a key legislative gap.

Nevertheless, as many wetlands in the GBR catchment are to some extent degraded, restoration and rehabilitation of wetlands will also be important to meeting overall QWP objectives.

### Regulation and wetlands

The successful development and implementation of regulations is critically dependent on the robustness, accuracy and stakeholder acceptability of the area to which the wetlands regulatory regime applies, wetland definition and classification. Acceptance will also be dependent on the costs of development approvals, impact assessments, and any restrictions or controls, and how these costs are allocated between landholders, developers and the community.

As discussed in chapter 4, wetlands mapping represents a significant achievement for the Programme, but several issues remain, including:

- the required scale of mapping for local government or NRM planning, or onground management of individual wetlands.
- the level of specification of ecological characteristics.
- the requirement for further ground-truthing and ongoing updating of wetlands mapping products. The ability to update information has been built into the mapping and information capture systems.

The efficacy of regulations to protect Queensland's wetlands also depends on the robustness of the definition and classification systems:

 Further refinement of the wetlands definition, for the purposes of a regulatory regime is likely to be required, to only include those wetlands which should be regulated.



 A robust framework for wetlands delineation and classification is essential for regulation and planning based on multiple values. For example, if there are concerns about accuracy and certainty of mapping, particularly at an individual property level, there should be a process for resolution of issues as otherwise could form the basis of opposition to regulation – for example, consider the response to the development of property maps of assessable vegetation under the Vegetation Management Regulation 2000 (Qld).

Despite the delays in regulatory development, there is some evidence that wetlands mapping information has already been incorporated into statutory frameworks. For example, in the FNQ2025 Statutory Regional Plan, QWP wetland mapping and AquaBAMM rapid assessment have been used for mapping layers. Mapping has been used as the basis for environmental values and water quality objectives under the Environmental Protection Act. The mapping has been used as a major input to recent Wild Rivers nominations and forms the base layer for the Map of Referable wetlands.

# Regulatory development-specific projects

It is not yet possible to evaluate the effectiveness of the suite of regulatory development-specific projects, because the majority of projects have not yet been completed and the regulations have not been developed or implemented.

#### 5.3 Key issues

# 5.3.1 Integration with OWP Projects and other initiatives

The interconnections between the regulatory projects were not as clear as, for example, in Focus Area 1. The limited progress with overall development of the regulatory framework has caused delays with the various QWP regulatory projects.

The regulation-specific projects were, by design, kept separate from other QWP projects given Cabinet processes and confidentiality requirements. Some departmental officers noted this extended to individual QWP agency staff generally being involved in regulatory projects or non-regulatory projects, but not both. In part, this approach has been taken to encourage stakeholder involvement in the other "non-regulatory" QWP projects and minimise the risk of stakeholder mistrust.

# 5.3.2 Consultation, engagement and communication processes

There has been consultation on the ecological character description projects with the establishment of knowledge panels and steering committees. Also, the AquaBAMM project involved consultation with stakeholders across the GBR.



As identified above, there has been more limited stakeholder consultation or publicly available information about the development of the regulatory framework. Apart from some recent trialling of buffer guidelines, an NRM body participant observed that these projects have been conducted "in-house within-agency". Other local government, industry and environmental stakeholders are also waiting on information and further developments.

Most departmental officers noted the necessity of restricting communication or consultation around regulations until they were developed, for a variety of reasons including:

- the need for further science and research to form the case for regulation, and
- the sensitivities associated with Cabinet processes.

However, it was also recognised that there was a "strong undercurrent" of landholder suspicion and mistrust of government intentions to develop regulation. One participant suggested that this disrupted some on-ground works under the QWP as noted in the Final Report of the Pilot Programme (Smith *et al* 2007, p. 15):

"Some private landholders were suspicious and/or resentful of the Pilot Programme, viewing it as yet another 'government program' being used to undermine their 'property rights' and as possibly providing the basis for increased legislative controls on their activities. This was especially so where field trials and monitoring were proposed and data recorded and/or there had been a history of interaction with Qld Government agencies concerning native vegetation under the Qld Veg Management Act 1999."

Nevertheless, others involved in the GBRCWPP Pilot Programme of on-ground works noted that the separation between the regulatory and non-regulatory components of the QWP worked well, and enabled the on-ground project team to establish their separation from government regulatory development and build trust with stakeholders.

# 5.3.3

#### A perspective

"Landholders are very interested in knowing what is on their land, but equally interesting in ensuring no one else finds out"

Departmental Officer

# Legacy issues and implementation strategies

Several interrelated legacy and implementation issues arise with the recent announcement by Premier Anna Bligh confirming the Queensland Government's commitment to develop and implement regulations to protect and rehabilitate wetlands.



Consultation and engagement with stakeholders around regulatory development is now critical to ensuring its successful implementation, as well as managing various stakeholder expectations.

#### A perspective

"Wetlands are much more than just filters for the reef".

Researcher

Clarity and consistency about the underlying objectives of regulations, and how these will be balanced, is also essential. Many evaluation participants noted disjuncture between managing wetlands primarily for GBR water quality outcomes (the goal of the GBRCWPP) versus managing wetlands for multiple values (the goal of the QNHTWP). If the regulatory framework aims to specify which activities are "prohibited, controlled, or permitted", clear articulation of underlying wetlands objectives will be necessary.

# 5.4 Overall contribution to QWP

Overall, some projects under Focus Area 2 have not yet achieved the output of "natural resource planning and cohesive planning arrangements to protect, conserve and manage wetlands." With an extension for many of the regulatory projects until mid-2009, the Programme still has much to achieve to effectively deliver on these projects.

# What changes in planning arrangements have occurred to improve wetland condition and extent?

As the full regulatory framework has not yet been developed or implemented, there have not been substantial changes in planning arrangements (in response to statutory requirements) to improve wetland condition and extent. However, there has been a considerable amount of preparatory work and there has been some incorporation of mapping products into regional planning.

# What are the approaches to developing and implementing NRM plans that recognise and support wetland conditions?

Regional NRM bodies are beginning to use QWP products and information with NRM planning and implementation (see chapter 6 and 8).

# 5.5 Summary

The regulations which will be implemented have the potential to fill critical
gaps in legislation, and help to secure long-term sustainable protection and
management of wetlands in the GBR catchment. The development and
implementation of the regulations will be critically dependent not only on the
costs and types of controls themselves, but also on the robustness, accuracy
and stakeholder acceptability of the supporting wetlands mapping, definition
and classifications.



- The development of the regulatory framework has been significantly delayed. The reasons for delays are not well documented, but include the lengthy periods required to gain cross-agency approval and establish contracts. Delays have cascaded throughout the set of regulation-specific projects. It is not evident that clear lines or authority and responsibility were available to enable the Taskforce to deal appropriately with delays and expedite the development of regulations.
- To date, there has been limited communication or consultation on the development of the regulatory framework, either with stakeholders or across departmental officers involved in the QWP, largely due to Cabinet processes.
- On 28 October 2008, the Queensland Premier announced the Queensland Government's continued commitment to developing regulations to protect and rehabilitate wetlands.
- Clarity and consistency about the underlying objectives of regulations, and how
  these will be balanced, is essential. The goal of the GBRCWPP is to manage
  wetlands primarily for GBR water quality outcomes, whereas the goal of the
  QNHTWP is to manage wetlands for multiple values. If the regulatory
  framework aims to control certain activities, clear articulation of underlying
  wetlands objectives will be required.



# 6 On-Ground Activities to Protect and Rehabilitate Wetlands

This chapter evaluates how the Queensland Wetland Programme has implemented on-ground activities to protect and rehabilitate wetlands (Focus Area 3). The Great Barrier Reef Coastal Wetlands Protection Programme (GBRCWPP) projects were a key mechanism for the delivery of Reef Water Quality Protection Plan objectives. As identified in Chapter 1, the Reef Plan aims to "halt and reverse the decline in the quality of water entering the reef". In addition to seven GBRCWPP projects, one project was funded through the Queensland Natural Heritage Trust Wetlands Programme (QNHTWP) through a direct contract between the Australian Government and FNQNRM.

# 6.1 Focus Area 3 projects: on-ground activities

The eight Focus Area 3 projects included direct implementation activities, as well as research intended to support or facilitate implementation of on-ground management. As summarised in Table 6.1, these projects covered:

- Establishing wetlands rehabilitation guidelines When released, the intention is that these guidelines will provide practical and specific guidance about how to rehabilitate different wetland types in the GBR.
- **Prioritising wetland investment** A decision support system (DSS) was developed and implemented to enable stakeholder input into the strategic prioritisation of investment in wetland management, at the GBR catchment level and at regional levels.
- Implementing on-ground management activities The Pilot Programme, undertaken from 2005 to 2007, is a major programme that implemented on-ground works in 22 project sites across the GBR catchments region (see Figure 6.1 for location map). The Phase Two Wetland Plan Development is currently implementing on-ground works in FNQ, Mackay-Whitsunday and Fitzroy Basin NRM regions. Across these two sets of projects, a range of management activities have been undertaken, including aquatic and riparian weed management, fencing, revegetation, pest management, protection and restoration of natural hydrology, improved water quality, and managing fish passage.
- Promoting the adoption of incentives for sustainable wetland management on private land Two projects were intended to support the



adoption of incentives for wetlands management on private land. An early QWP project involved the provision of advice on creating incentives. More recently, the QWP has directly funded a staff position within the Nature Refuge Unit, EPA, to pursue wetlands-related conservation agreements.

• **Acquiring wetlands** – One project aimed to acquire and list as National Park, significant wetlands in the GBR catchment.

Table 6.1: Summary of Focus Area 3 projects: on-ground activities

Project Title (short name used in this report in bold)	Project Description
Adoption of Incentives	Provided recommendations on the mix of incentives to increase sustainable land management practices on freehold and leasehold land, particularly with reference to wetland areas in the GBR catchment NRM region.
Pilot Programme	Representing a significant set of projects within Focus Area 3, this two-year, \$2 million programme was funded under the GBRCWPP to implement on-ground activities to conserve and manage priority wetlands. 22 on-ground works projects were completed under the programme, applying various management actions and tools.
Decision Support System  DSS	Development and implementation of a DSS to strategically prioritise wetlands at the GBR catchment level (primary DSS) and at the regional level (secondary DSS) for investment in wetland protection and rehabilitation.
Phase two wetland plan development and implementation  Phase Two	Following selection of regions using the primary DSS, the secondary DSS was applied by NRM bodies within each region to prioritise wetlands for protection and rehabilitation, and implement on-ground works. The three regions were: Far-North Queensland, Mackay-Whitsunday, and Fitzroy GBR.
Resourcing to support GBR Wetland Nature Refuge Negotiations Nature Refuges	Funded a position within the Nature Refuge Unit, EPA, for two years, to pursue conservation agreements for wetland areas in the GBR catchment with high conservation value.
GBR Catchment Wetlands Acquisition Acquisition	Aimed to acquire and list as National park, significant wetlands in the GBR catchment (Performance Report 2005-06).
FNQNRM GBR Public Reserves Management Concept  Public Reserves	This project aimed to engage local government authorities in the Terrain NRM region, in the management of coastal wetlands on public reserves. This engagement was to facilitate the development of a coastal wetland management plan templates, and to increase the capacity of local governments to manage public reserve coastal wetlands.
Wetlands Rehabilitation Guidelines	This anticipated outcome of this projects is improved management of wetlands, through the provision of guidance to wetland managers.

#### 6.2 Evaluation of Focus Area 3 projects: on-ground activities

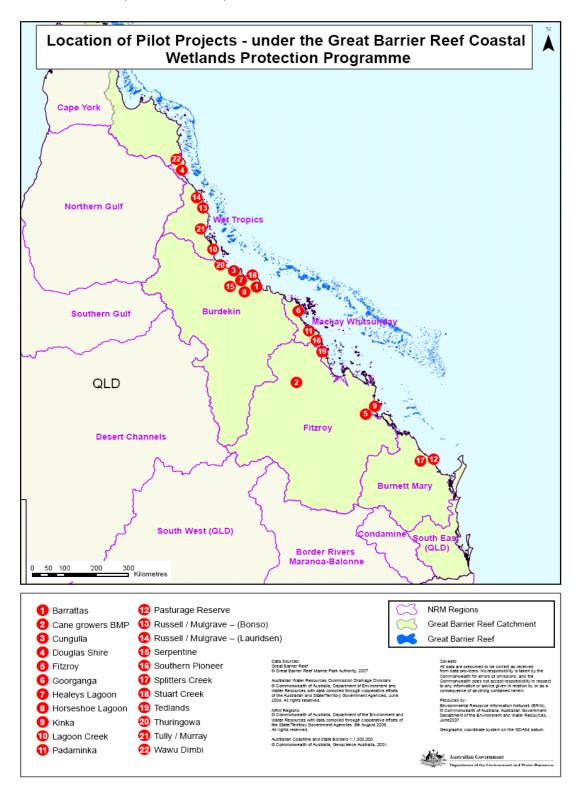
This section evaluates the efficiency and effectiveness of Focus Area 3 projects.

#### 6.2.1 Efficiency of the projects: on-ground activities

Programme Annual Reports did not closely track progress of GBRCWPP projects, and therefore information on achievements, timing or delays was not readily available for all Focus Area 3 projects. However, available final reports, progress reports and interviews highlighted various reasons for delays to three projects: the Pilot Programme, Wetlands Rehabilitation Guidelines, and Wetlands Acquisition.



Figure 6.1: Map showing location of the 22 Pilot Programme project sites (Smith et al 2007)





#### A perspective

"In the tropics, you need to allow 18 months to do what looks like a traditional 12 month project... particularly for wetlands, which can get extremely wet."

NRM representative

Stakeholders involved in the Pilot Programme noted that delays were caused by Cyclone Larry in 2006, and extended wet seasons in both 2006 and 2007. These seasonal conditions posed particular problems for works, such as fencing and controlled burning that could only be conducted during the dry season (Smith *et al* 2007). Various stakeholders in the Pilot Programme, as well as those involved in other NRM activities, noted that careful timing is required to ensure the preparatory, planning and engagement work is undertaken in time to enable works to commence at the start of the dry season.

Changes to the role of the Independent Reference Group (IRG), occurring after Pilot Programme commencement, was also a cause of delays. However, these changes appear to have been dealt with some pragmatism and flexibility by both project consortium (implementation) and project management teams. For example, the intention at the outset of the project was for the IRG to provide a list of prioritised wetlands for management. When this was not possible, the Project Team progressed by establishing an initial suite of projects from their own knowledge networks (Smith *et al* 2007).

Although the short time-frame for Pilot Programme projects was not in itself a substantial cause of delays, it limited the range and effectiveness of types of projects that could be implemented and hence what outcomes were achieved. For example, there were delays in securing landholder approval for works in high-value wetland sites. The implications of the short timeframe planned for projects is discussed in more detail in section 6.2.2.

#### A perspective

"It was bizarre to need to have the Minister sign off on a \$50,000 fencing project...

Stakeholder

In the case of the Pilot Programme projects, the inadequacy of timeframes was compounded substantially by delays caused by the project approvals process:

- After commencement of the programme, the IRG introduced the requirements for co-investment for projects. Although the project team noted the value of co-investment, in the Final Report they observed that there were adverse consequences in terms of timing: "[Co-investment] was not a requirement under the consortium's contract, and did create substantial delays in the approval process and administrative complications in implementation." (Smith *et al* 2007, p. 12).
- More critically, there were substantial delays in gaining Ministerial approval
  for about half the projects under the Pilot Programme, following their
  recommendation by the IRG. One stakeholder noted delays of several
  months in waiting for the Minister to respond.



Although the factors described above limited the effectiveness of the Pilot Programme, the impact on overall project duration itself does not appear to have been substantial. A contract extension of four months (to 30 June 2007) from the original two-year duration was granted by the then Department of Environment and Water (DEW), which allowed "most Pilot Programme projects to be delivered with the majority of scheduled activities completed within time and budget" (Smith et al 2007, p. 15).

The completion of the Wetlands Rehabilitation Guidelines has been delayed. The Final Evaluation report was completed in May 2008. However, departmental staff reported that inconsistencies between the Guidelines and other technical information published under the QWP prevented its release, until amendments can be made. Stakeholders also identified that other reasons for delays were an overambitious project scope (given the timeframe and budget), and time for the project steering group to review draft material.

Delays with the Wetlands Acquisition project have primarily been associated with the difficulty of acquiring wetland properties. At a cost of \$50,000, 4,700ha of unallocated state land has been transferred and gazetted as Halifax Bay national park, but the remaining \$700,000 of project budget remains unspent. The reasons for ongoing difficulties in making acquisitions for gazettal as National Park are discussed in section 6.2.2.

#### **Project budgets**

Initial budgets and progressive expenditure on Focus Area 3 projects were reported following Australian Government Department of the Environment, Water, Heritage and the Arts (DEWHA) procedures, but were not recorded in QWP Annual Reports. A complete assessment of project budgets for Focus Area 3 was not possible.

The Pilot Programme budget was \$2 million and was the largest component of Focus Area 3. The Final Project Report notes that most projects were completed "within budget", and stakeholders noted that additional funding was provided when DEW requested variations and additions to work (Smith *et al* 2007).

#### A perspective

"We weren't burdened with reporting demands, which allowed us to get on with it and get information out at the ground level"

Stakeholder

#### Progress monitoring and reporting

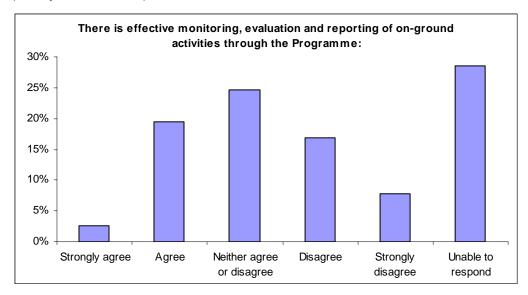
As discussed in more detail in chapter 9, several departmental staff noted that GBRCWPP projects, including Focus Area 3 projects, did not face the same monitoring and reporting requirements as QNHTWP projects.



In the case of the Pilot Programme, the Final Report noted that the consortium adopted the QWP Monitoring, Evaluation and Reporting framework, which was "incorporated into a user-friendly progress reporting process for individual projects". These reports were submitted on standard templates to the DEW project managers. The Consortium noted that the concise contractual reporting requirements allowed them to focus on providing information for end-users, and that "DEW staff demonstrated a flexible and accommodating approach to the vagaries inherent in the Pilot Programme and responded positively to consortium requests for variations to individual projects" (Smith *et al* 2007, p. 15).

A majority of survey respondents that responded to the statement "There is effective monitoring, evaluation and reporting of on-ground activities through the Programme" chose to "Agree" or were neutral (see Figure 6.2). However, some 25 per cent of respondents chose to "Disagree" or "Strongly disagree".

Figure 6.2: Monitoring, evaluation and reporting of on-ground activities (Survey Question B13)



#### 6.2.2 Effectiveness of projects: on-ground activities

Although the Focus Area 3 intended outcomes refer to both reef and non-reef catchments (EPA 2005), the QWP on-ground works projects through the Pilot Programme and Phase 2 were exclusively implemented in the GBR catchment. However, due to a lack of ongoing monitoring, and that it may take several years for the projects to make a difference, it is not possible to assess the overall impact on Focus Area 3 projects on Reef water quality.



There have been a number of achievements from the Focus Area 3 projects, but also substantial challenges which have limited the potential effectiveness. In this section, the effectiveness and limitations of major Focus Area 3 projects are discussed.

#### **Prioritising investment**

The Decision Support System, intended to prioritise investment in wetlands, was implemented at two scales: at a whole-of-region scale, to prioritise regions for Phase 2 project investment (primary DSS), as well as at the catchment scale in several locations around the GBR catchment (secondary DSS). One stakeholder noted that using of the secondary DSS to prioritise investment at a catchment scale was more appropriate a tool than using the primary DSS at the regional scale.

There is evidence that the secondary DSS was successfully used to inform investment priorities in some locations. For example, in a trial of the DSS at Tully, there was good landholder involvement and local approval of the use of the DSS for prioritising water quality funding (Smith *et al* 2007). DSS workshops were also held in Fitzroy Basin, Mackay-Whitsunday and Far North Queensland regions, to priotise and select wetlands for investment (under Phase 2 Wetland Planning project).

Many stakeholders reflected that the key potential impact of the DSS lies in its use as a tool for consultative decision-making about wetlands management. One NRM staff member thought that the DSS was particularly effective in increasing understanding amongst stakeholders that wetlands need to be managed for differing, and sometimes competing, values and objectives. However, another stakeholder expressed concern that the process of using the DSS is particularly susceptible to lobbying, resulting in biased outcomes.

#### A perspective

"The DSS is a great way to bring differing views together, and as a group work through the different underlying objectives of management and values of wetlands."

NRM staff member

Concern was also raised about the complexity of the DSS user interface and criteria. An agency staff member noted that the DSS requires an "expert" present to facilitate its use, both in terms of the navigating the user interface and to explain the meanings of various criteria. For example, feedback from a trial of the DSS in the Herbert catchment conducted under the Pilot Programme included:

"the criteria [are] too technical/complex/difficult to understand... There is a need to simplify the DSS language and to add in more visuals to help understand the criteria." (Smith et al 2007, p. 31)

Since then, a DSS Upgrade project was funded through GBRCWPP to improve the user interface, weightings and instructions of the DSS.



#### A perspective

"The DSS is in truth not that useful. It is designed as a consultation tool to keep all parties happy, but as a result is open to lobbying."

Stakeholder

Some stakeholders questioned whether the DSS effectively takes into account scientific information on ecological values. However, this concern seems to have arisen because stakeholders were not aware about the recent integration of AquaBAMM and DSS systems. These two systems were funded and developed separately, and were not directly compatible. The recent development where AquaBAMM values scores can be used directly in the DSS should enhance the inclusion of information about ecological values.

#### Implementing on-ground management activities

A range of wetland management activities were applied across the 22 Pilot Programme sites. These included weeds management, grazing and fire control, revegetation, hydrology, fish passage, feral pig control, and constructed wetlands. As illustrated in Table 6.2, multiple management activities were implemented in each site.

Table 6.2: Pilot Programme locations and management strategies

Project location									
	Weeds	Grazing & fire	Revegetation	Hydrology	Fish Passage	Feral Pigs	Constructed Wetlands	Planning	Monitoring
Wawu Dimbi									
Douglas Shire									
Russell/Mulgrave									
Tully/Murray									
Lagoon Creek									
Thuringowa									
Stuart Creek									
Serpentine									
Cungulla									
Healeys Lagoon									
Horseshoe Lagoon									
Barrattas									
Goorganga									
Southern Pioneer									
Tedlands									
Fitzroy									
Kinka									
Padaminka									
Splitters Creek									
Pasturage Reserve									
Canegrowers BMP									



Documentation of project progress for Phase 2 projects is not available. However, the proposals show that on-ground works were planned for 25 wetland areas across three NRM regions (see Table 6.3).

Table 6.3: Phase 2 wetland sites

NRM region	Terrain (FNQ)	Fitzroy Basin	Mackay-Whitsunday
Wetland sites	Tully Murray	Funnel Creek NC	Demoylans Lagoon
	Kyambul	Corio Wetlands	Eden Lassie Catchment
	Porters Creek	Lake Nugga & Consuelo	Lower Fursden Creek
	Bunta Lagoons	Hedlow	Lower Neilson Creek
	Glenbora Wetlands	Southern Fitzroy	McEwans
	Dimouros	Perch Creek NC	Orphanage Swamp
	Lower Herbert	St Lawrence	Proserpine-Goorganga
	Russell/Mulgrave		Sandringham Lagoon
			Padaminka
			Tedlands Station

#### A perspective

"The Pilot
Programme formed a
great building block
foundation."

Stakeholder

There have been a number of achievements at specific Pilot Programme project sites. Strong and effective engagement between Consortium members and stakeholders was reported, and a strong network of project partners was formed and maintained for the duration of the Programme. Monitoring of wetlands outcomes has been limited, but there is evidence that in some locations, management activities achieved improvements in wetland condition. In a few project sites, 3-year voluntary agreements with landholders have been agreed to continue maintenance works after the Pilot Programme ended.

The Pilot Programme achieved an extensive spread of project locations across the GBR catchment region. In a few locations, the Pilot Programme projects were able to build on existing opportunities, networks and wetland management work that had occurred during recent years. For example, one stakeholder noted this was the case for the three project locations (Horseshoe, Healeys Lagoon and Cungulla) that the project consortium team developed from their own existing networks and knowledge at the beginning of the project. However, this level of integration was not achieved at all project sites.

#### A perspective

"The Pilot Programme was not concentrated or targeted enough in its approach."

Stakeholder

The overall effectiveness of the Pilot Programme was compromised by the dispersal of funds across a large number of projects, resulting in individual projects being insufficiently funded. One stakeholder observed that DEW did not provide direction on prioritising and consolidating funding, other than "requiring action across all NRM regions." Another stakeholder expressed frustration at the lack of



clarity from DEW about the underlying objectives of the Pilot Programme, and the ongoing pressure to "fund a large range of small projects". There were also concerns about lack of direction on whether to manage wetlands solely for reef water quality outcomes, as per the Reef Plan, or to recognise the range of wetlands values.

One stakeholder suggested that a key achievement of the Pilot Programme was the demonstration to stakeholders of what activities can be achieved within limited budget and timeline. Nevertheless, the two-year duration of the Pilot Programme, which effectively resulted in 12 months of actual implementation time, was not sufficient to enable the full potential from wetland management projects to be realised. This was particularly due to the time taken to engage with landholders and other stakeholders. As described in the final project report (Smith *et al* 2007):

#### A perspective

"The biggest constraint was the time given to onground projects".

Stakeholder

"Project partners also indicated a desire and need for larger and longer term projects particularly citing the long lead time often required to court and engage landholders at some of the more extensive, valuable and economically more productive wetlands sites... The Pilot Programme has clearly demonstrated that wetland projects are generally unsuited to short lead-times"

Several survey participants also noted concern about insufficient timeframes, for example:

"The project time frame of 12 months was not long enough to deliver the program's high value long-term conservation objectives... limits scope of projects, reduces the value of monitoring, doesn't allow for responsive management...

As recommended in the final report of the Pilot Programme:

"To achieve the best outcomes possible for our wetlands, the consortium strongly recommends that DEW direct its investment into fewer projects that are larger scale and with longer timeframes." (Smith et al 2007)

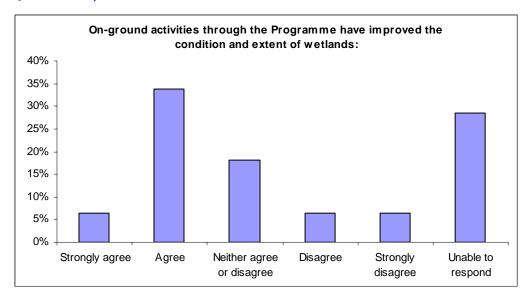
The short time-frames were further compounded by the lack of specification about what programmes, projects or processes would follow after the completion of the Pilot Programme. One agency staff member noted that the purpose of the Pilot Programme was to fill existing gaps in on-ground management works. However, some industry and NRM stakeholders expressed concerned that the label of the programme as a "pilot", implied that it was a precursor to a more significant programme, and that this resulted in challenges in communicating to landholders whether governments had any long-term commitment to follow-up works, such as maintenance (see section 6.3 for discussion of legacy issues). There were mixed opinions from stakeholders about whether this limited the effectiveness on-ground works.



Although some Phase 2 projects built on Pilot Programme projects, many stakeholders observed that, overall, there could have been far more continuity between the Pilot Programme and Phase 2 projects - representing a lost opportunity to build on some of the key achievements from the Pilot Programme.

A majority of survey respondents that responded to the statement "On-ground activities through the Programme have improved the condition and extent of wetlands" chose to "Agree" or were neutral (see Figure 6.3). A small percentage chose to "Disagree" or "Strongly disagree".

Figure 6.3: On-ground activities to protect and rehabilitate wetlands (Survey Question B10)



## Promoting the adoption of incentives for sustainable wetland management on private land

The first project, "Adoption of Incentives", was completed early in the QWP. Project reports extensively documented key learnings, as well as preferred characteristics of an incentives programme.

However, the findings and recommendations from this project appear general in nature, for example, in suggesting that programmes include one-off payments, a range of incentives, co-ordination between programs, longer-term and flexible programs, and highly localised delivery. The critical limitation of the study, as identified in the Final Report, was the broad geographic scale of analysis:



"Although information is provided at the NRM regional scale, there are marked differences at a sub-catchment scale — in industry, community and government capacity — that are likely to be critical in take-up of sustainable land management."

The Adoption of Incentives report was not widely disseminated. Like the Final Report for the Pilot Programme, the "Adoption of Incentives" reports were not made available on the GBRCWPP website until 3 November 2008. The delay in publication has limited its effectiveness in promoting the adoption of incentives for on-ground wetland management. For example, one stakeholder involved in onground works projects had not heard of the incentives project, whereas another had not found it useful.

The second project, "Nature Refuges", is currently underway. There is limited project documentation available, but as at 30 June 2008, four of six potential nature refuges had submitted a tender application for funding through Nature Assist Round 2. The 2007-08 Annual Programme Report also noted growing interest in the project. A departmental officer noted that it was not unexpected that negotiations would be protracted, and may not always been successful.

#### Wetlands acquisition

Through the Wetlands Acquisition project, 4,700 ha of unallocated state land at Hallifax Bay, covering 15km of coastline, was successfully transferred and gazetted as National Park. One stakeholder observed that this was a relatively straightforward acquisition, because the land was state land (rather than leasehold or freehold), and the wetlands environment were not suitable for, and consequently not under pressure from, agricultural land uses. However, although State land, this transfer still involved considerable background negotiation.

As noted in section 6.2.1, the majority of funds allocated for acquisition remain unspent. A challenge is that acquisitions can only be made by the EPA if they are to become National Park. Several barriers and delays to further acquisition were identified in the acquisition project progress report including:

- the EPA's acquisitions policy, in which purchase prices can only be offered in accordance with independent valuation
- the increasing price of freehold agricultural land within the coastal area of the GBR over the last 5 years. Several potential acquisitions were valued well in excess of the \$700,000 funding available.
- unrealistic expectations from potential vendors that the value of Vegetation Management Act affected parcels of land



- gaming by potential vendors, and
- the target area of the lower coastal GBR, which is limiting because it is relatively intensely developed in small holdings.

A summary assessment of Focus Area 3 projects is outlined in Table 6.4.

Table 6.4 Summary Assessment of Focus Area 3 projects

Project Title	Project Objectives	Project Outputs	Assessment and/or Status
Adoption of incentives	The project Expression of Interest and Terms of Reference (TOR) lists a range of objectives for the study on adoption of programmes and incentives relevant to wetland conservation.	Two progress reports and a final report were specified in the TOR.	Project completed in 2005. Project reports include general findings. However, outputs are not widely accessible, the findings do not appear to have informed the design of incentive schemes in other Focus Area 3 projects.
Pilot Programme	The goal of the Pilot Programme was to "develop and manage a \$2.2 million (GST inclusive) two-year pilot programme under the GBRCWPP to ensure early onground activities to conserve and manage priority wetlands."	The final deliverables of the Pilot Programme include:  • A number of GBR catchment wetlands conserved and managed in accordance with outcomes sought under the GBRCWPP, the Reef WAPP, the NHT and HAP for Salinity and Water Quality.  • Preparation of a final report.	Project completed in June 2007. 22 projects were completed across GBR catchments, implementing various tools, mechanisms and management activities. Projects demonstrated what management activities were feasible within budget and timeline, received stakeholder support. There is some concern about whether the ongoing effectiveness of the overall programme was compromised by short time frames and the small budget of individual projects.
DSS	The objective of this project is "to develop a decision support system (DSS) to strategically prioritise wetlands at the GBR catchment level (primary DSS) and at the regional level (secondary DSS) for investment in the GBR catchment".	Decision Support System	Project completed, with ongoing improvements. The Primary DSS was used to prioritise 3 regions for Phase 2 investment. The Secondary DSS has been applied in various catchments. Identified as a useful tool to facilitate consultative decision-making.
Phase Two	"To prioritise and implement measures for the long term conservation and management of wetlands in the GBR Catchment based on priorities and targets identified in the region's Regional Investment Plan and in particular to rehabilitate and conserve areas of the Reef catchment that have a role in removing water borne pollutants."	Project outputs detailed in individual project proposals refer to a range of implemented onground works, as well as monitoring programs (such as water quality monitoring and fish fauna surveys).	Project underway in several wetland locations across Fitzroy Basin, Far North Queensland and Mackay-Whitsunday NRM regions.
Nature Refuges	"Fund a position within the Nature Refuge Unit for two years to pursue conservation agreements for wetland areas in GBR catchment with high conservation value."	The anticipated output was 2,500 hectares of high conservation value wetlands under perpetual nature refuges. This was dependent on agreement by individual property managers.	Position funded within EPA and applications for Nature Refuges have been assessed and two refuges approved.



Project Title	Project Objectives	Project Outputs	Assessment and/or Status
Acquisition	"To acquire and list as National Park, significant wetlands in the GBR catchment."		Halifax Bay gazetted as National Park. No other acquisitions have been made.
Public Reserves	Engage 5 coastal Local Government Authorities in the Terrain NRM region in the management of coastal wetlands on public reserves. Facilitate the development of a coastal wetland management plan template for coastal wetlands on public reserves managed by local governments. Increase the capacity of Local Governments to manage public reserve coastal wetlands and work with their communities and state government to coordinate resources and activities for wetland management.	Development of Coastal Wetland Reserve Plans and associated rehabilitation works will be undertaken in the five local government regions of Cairns City, Cardwell, Johnstone, Douglas and Hinchinbrook Shires.	Project ongoing at June 2008 (Annual Report). The project aimed to engage 5 coastal LGA authorities, but due to capacity issues funds originally allocated to on-ground works within the Douglas shire were reallocated to Cairns and Johnstone shires. Cairns Central Swamp is one example of a wetland area that has been successfully rehabilitated, with a process for ongoing maintenance. Information about other councils or whether the planning template was delivered is not yet available.
Wetlands	To develop wetland rehabilitation	The anticipated project outputs	Project Final Report dated May
Rehabilitation Guidelines	guidelines for Queensland with a focus on the GBR catchment, which can be used by the GBR catchment community.	were wetland rehabilitation guidelines (manual), fact sheets, in web format, MS word, and hard copy.	2008, but guidelines not yet released, due to issues of inconsistency with other QWP outputs.

#### 6.3 Key issues

This section considers various issues arising from the Focus Area 3 projects in terms of integration, consultation, engagement, communication, knowledge base, building capacity and legacy issues.

#### 6.3.1 Integration of Focus Area 3 project with other OWP projects

Some Focus Area 3 projects did, to a certain extent, use various wetlands planning tools and information produced in other projects under the QWP. For example, wetlands mapping and classification, Wetlands Management Profiles, the DSS and AquaBAMM, were tested in Thuringowa as part of the Pilot Programme. Wetland Planning Phase 2 projects also incorporated various tools developed earlier in the QWP, including mapping products and the DSS. A Focus Area 3 stakeholder noted that they had been provided with extensive opportunities to contribute local on-ground knowledge to the mapping exercise, for example, through providing comments on seasonal differences in wetlands boundaries and extent.

Nevertheless, there could have been greater overall integration between Focus Area 3 projects and other QWP projects. For example, the Pilot Programme Final Report noted that while the Project Team was in regular contact with QWP project managers, there was limited opportunity for the project officers to have contact with other QWP projects. One stakeholder noted that this was partly due to the extensive number of concurrent projects, and number of individuals involved.



Projects delivering wetland management guidance, tools and research appear less well integrated with Pilot Programme and Phase Two on-ground works. For example, Focus Area 3 stakeholders noted that the Wetland Management Profiles were not directly useful to on-ground works, because, like many NRM extension material, they had "too many words for landholders" but "too little technical detail" for NRM staff and other practitioners. The Wetlands Rehabilitation Guidelines were developed subsequent to, and were not specifically intended to inform the Pilot Programme. However, there were also mixed views about the extent to which Pilot Programme projects informed the development of the Rehabilitation Guidelines.

#### A perspective

"Landholders were suspicious about a hidden regulatory agenda behind the onground work".

Stakeholder

As discussed in chapter 5, the regulatory framework development has not been public and has not been strongly integrated with other QWP projects, including Focus Area 3 projects. The implications of this for on-ground works outcomes are discussed in section 6.3.3.

#### Integration of Focus Area 3 projects with other programmes

Some on-ground projects filled gaps in longer-term activities funded through programmes. However, this was not the case for many projects. Although one agency member noted that the Pilot Programme and Phase Two "were never supposed to be about advertising for funding", the Pilot Programme consortium team noted confusion by the broader lack of integration between NRM-related funding programs:

"Frustration and concern was expressed by many Pilot Programme partners over the difficulty that they faced in coming to grips with the plethora of wetland and other related NRM funding programs, their differing approaches and criteria, their relationship to each other, and how the Pilot Programme fitted into the mix. The reality seems to be that most of funding accessible to the community comes via Australian Government programmes, and that multiple branding and 'siloing' of funds can lead to confusion, inefficiencies and possibly duplication of effort at the local level." (Smith et al 2007, p. 14)

#### 6.3.3

#### Consultation, engagement and communication

#### A perspective

"Because the project team was very experienced, they connected well with landholders, who are mainly from the older generation."

Stakeholder

#### Stakeholder engagement and communication

A key achievement of Focus Area 3 was the level of engagement with local stakeholders within the Pilot Programme projects. As noted by several stakeholders, the Project Consortium members leveraged their existing experience and networks to build effective links and local teams throughout the region through. For example, one stakeholder in the Burdekin Dry Tropics region noted



that engagement was enhanced because the Consortium member was born and grew up in the region.

#### A perspective

"Local drivers [for onground works] came from all walks of life."

Stakeholder

Pilot Programme stakeholders identified the importance of "local drivers" to the success of on-ground projects. These drivers included landholders, local governments, and NRM bodies. The extent of local drivers varied throughout the region, but in many cases local partners demonstrated strong commitment to projects:

"The ultimate success of projects hinges on the availability and strong commitment of the local driver" to deliver project outcomes. Where this commitment was lacking, or the key driver moved on and was not replaced, it was necessary to make other arrangements... Local partners in many cases have taken on Pilot Programme work over and above their existing obligations and priorities. However, in the main, they have demonstrated a high level of commitment in achieving scheduled outcomes." (Smith et al 2007, p. 13)

As identified in section 6.2, the Pilot Programme was successful in securing 3-year voluntary management and maintenance agreements with landholders in the Burdekin Shire Council, for aquatic weed management at Healeys Lagoon and Horseshoe Lagoon, as well as for feral pig control in Proserpine. However, landholder suspicion of the underlying motivations of the Programme restricted the potential for establishing longer-term agreements:

"Very few private landholders embraced the Pilot Programme's initiatives with sufficient enthusiasm and trust to provide the opportunity for the project Team to broach the subject of voluntary conservation agreements or other long-term commitment to the works." (Smith et al 2007, p. 15)

#### A perspective

"If you are aiming to involve Traditional Owners in wetlands management, you would need to have the time to get out oncountry."

NRM staff member

Traditional Owner involvement was also limited throughout the Focus Area 3 projects. Some notable exceptions include the Pilot Programme Wawu Dimbi and Tully projects. However, stakeholders noted that in the majority of projects across Focus Area 3, there was no Traditional Owner involvement and only limited incorporation of indigenous cultural values. Stakeholders identified that there was insufficient time or resources within projects for project teams to get out oncountry to successfully engage with Traditional Owners – however, this was not an objective of the Focus Area 3 projects. Another stakeholder suggested that opportunities for involvement were somewhat limited because, in some project locations, Traditional Owners have not had a presence or influence for many generations, such as in corporate cane farming regions.

In addition to strong communication between the Project Team and stakeholders involved in individual Pilot Programme projects, a key achievement was the



development of a strong network of project partners across projects within the Pilot Programme. The seminar held towards the end of the Pilot Programme, in May 2007, "demonstrated the coverage of this network". However, stakeholders observed that information sharing across the network could have been enhanced if such a networking seminar had also been held earlier in the Programme.

#### Publication and dissemination of information

#### A perspective

"It is always the question of after a programme, who is going to take carriage of hosting the information?"

Stakeholder

As part of stakeholder engagement within projects, dissemination of information to partners directly involved in Pilot Programme projects appears to have been reasonably effective. However, a major shortcoming of Focus Area 3 is the limited accessibility of project products. The findings, outcomes and learnings of projects have not been widely published or disseminated. For example, the Pilot Programme final report and progressive "Information Bulletins", completed by 2007, are not available for downloading. The Adoption of Incentives reports are also not publicly available. Stakeholders who were involved in early parts of the Pilot Programme, and were supportive in general, have been left wondering "what happened to it".

The final seminar of the Pilot Programme was a key forum for promotion of findings, and was well received by participants. As discussed in chapter 8, the Roadshow was another key forum for promoting the QWP, including Focus Area 3. However, as acknowledged by agency staff, further promotion and dissemination of projects is necessary.

#### Knowledge base and capacity of resource managers

#### Knowledge base

Expanding the underlying knowledge base (as distinct from building capacity) was not an explicit goal of Focus Area 3 projects. Ongoing and integrated scientific monitoring was not an explicit priority of Focus Area 3, and was not funded through the programme. Nevertheless, at least some monitoring was conducted in half of the Pilot Programme projects for the duration of the projects. Proposals for Phase 2 also show that there was the intention to conduct monitoring at various locations.

Some stakeholders suggested that 12 months is a vastly insufficient timeframe to observe or attribute changes in wetland condition to management activities. In contrast, other stakeholders were more confident that the monitoring conducted demonstrated improvements in wetland condition. Although it was noted that some types of wetland change, such as vegetation response, must be observed over much longer timeframes, recolonisation of fish species was noted to happen

6.3.4



quickly after a management activity. The results of monitoring from across projects was not synthesised.

One departmental officer observed that a research-based approach could have also been built into the Pilot Programme projects to inform future works. For example, the on-ground works in lagoon systems could have been structured to test the future applicability of the management response to like systems. This approach would have made the on-ground works projects more complicated but it would have added to the knowledge base about wetland management and the most efficient management and rehabilitation approaches.

Stakeholders also identified that there remain critical gaps in the knowledge base, particularly around wetlands restoration and rehabilitation (This issues is addressed further in section 6.3.5). The Wetland Rehabilitation Guidelines were intended to at least partly meet these needs – but there have been concerns about the degree of integration with other QWP products that have to date prevented their release.

"The Pilot Programme successfully showed wetlands managers that wetlands are complex rather than single-issue management problems."

A perspective

#### Capacity of resource managers

Feedback on the Pilot Programme was generally in support of its achievements in building capacity amongst local stakeholders involved in projects. In addition to providing technical support across all project sites, the Pilot Programme aimed to build capacity through funding a local project officer at 12 locations. Some stakeholders reported that landholders' awareness was raised significantly. As one survey respondent observed:

"People did not realise how important the project was until they saw what the lagoon could look like again after weed removal. Landholder support should be easier next time"

Nevertheless, there remains significant variation in local capacity to deliver onground wetland management works across the region, both in terms of expertise and staff resources:

"The Project Team was in high demand to provide assistance with on-ground delivery of some projects, while others required only technical support to capitalise on existing capacity that 'hit the ground running' once funding was made available."

Notwithstanding achievements in some individual projects, other stakeholders expressed reservations about whether Focus Area 3 projects were effective, in building the capacity of landholders in wetland management. They suggested that improving knowledge, awareness and appreciation of wetlands and wetland management amongst agency and NRM staff is critical to building capacity amongst local stakeholders.



The stakeholder survey identified key external barriers to on-ground activities being implemented through the Programme. The most common barriers were lack of funding and challenges with achieving landholder agreement and participation.

Table 6.5 Key external barriers to implementation of on-ground activities through the Programme (Survey Question B12)

Key external barriers			
Lack of funding for on-ground activities			
Landholder agreement and participation			
Funding cycles and timing of release of QWP products			
Capacity including availability of workers and project staff			
Lack of understanding and knowledge about wetlands			
Legislative/policy frameworks not protecting wetlands			
Compliance with paperwork and "red tape"			
Poor coordination and not involving all stakeholders (especially local government)			
Lack of incentives for on-ground activities			
Lack of clarity of Departmental roles and responsibilities			
Trust and suspicion with the works			
Community attitudes to wetlands and lack of awareness of wetlands			

#### 6.3.5 Legacy issues

As identified in the Final Report, a key legacy of the Pilot Programme was the momentum created through the network of participating landholders, local government, NRM body, agency, NGO and research members. Many stakeholders expressed a desire that this momentum be leveraged to ensure ongoing maintenance of on-ground works.

As noted above, in some locations the Pilot Programme projects were integrated into longer-term management of wetlands. However, there is widespread concern that many of the achievements of the Pilot Programme have not been maintained through follow-up work, and that opportunities for further improvements have been lost. For example, survey respondents suggested:



"A MOU with landholders [is required] to continue maintenance in conjunction with regional NRM groups. The project has raised desire for other landholders to get assistance with removal of weeds from wetland areas, with little scope for this to occur."

"This project was limited by the fact that it is a pilot project, so additional funding is required to actually achieve on-ground outcomes and roll the project out across the State... The project currently relies on NRM groups/local government to undertake further work, however some training and agency input is required to get this off the ground."

#### A perspective

"To control aquatic weeds, a usual approach is to plant trees along river banks. But in some cases, because of the impact on water quality, shading is the last thing you'd want to do. There still needs to be better knowledge about wetlands management."

Stakeholder

A further key legacy issue is that improvements to the knowledge base are still required. The GBR Consensus Science Report (Brodie et al 2008) highlights that critical gaps remain in terms of knowledge of effectiveness of restoration techniques – particularly relevant in many GBR wetlands, which are in a degraded condition – as well as knowledge of how to incorporate social and economic impacts:

"Knowledge of the effectiveness of restoration techniques is insufficient to guide investment - the effectiveness of riparian vegetation and wetlands as potential filters of sediments, nutrients and pesticides is known for some cropping locations, but is limited for grazing areas. The system understanding that is required to prioritise investment into riparian and wetland rehabilitation, taking into account social and economic factors, is extremely limited." (Brodie et al, 2008, p. 40)

There is also an ongoing need to further build capacity amongst the wide range of stakeholder groups directly or indirectly involved in wetland management. Pilot Programme team members suggested that although the model of direct provision of technical expertise worked well, for future programmes should focus more on facilitating building of local capacity.

Wetlands also continue to be degraded because of a lack of skilled staff, across different types of organisations. One survey respondent highlighted the problem associated with high staff turnover:

[A barrier is] loss of corporate knowledge — ie. management capacity learnt in regions lost with staff turnover... unless career paths exist for wetland managers".

#### A perspective

"There is little understanding of the fact that with too much water, you can drown a wetland".

Stakeholder

Other stakeholders noted that technical support and education is needed across the spectrum of industry sectors – for example, urban developers, land managers, irrigation managers in water authorities, etc.



As identified in section 6.2, publications from Focus Area 3 are not widely accessible. Nevertheless, many stakeholders noted that publications are seldom the most effective way of sharing information. There were calls for a "regional wetlands management network" to facilitate information-sharing and the transfer of knowledge. This also highlights the importance of further extension activities with a range of stakeholders (see chapter 7).

#### 6.4 Overall contribution to QWP

The MER Strategy contained two high level performance measures for Focus Area 3.

## What improvements have occurred in the condition and extent of wetlands in reef and non-reef catchments?

In some individual project sites, there is some evidence that on-ground works improved the condition of wetlands. For example, there was evidence of recolonisation of some fish and bird species. However, monitoring was limited to the 12-month duration of projects, and it is not possible to determine overall changes to the condition or extent of wetlands. In many locations, follow-up maintenance has not been conducted. As wetland condition is a complex area it would have been difficult to assess this issue without the relevant condition assessment tools being in place that have only recently been developed

## What improvements have occurred in the water quality entering the Great Barrier Reef?

Monitoring of reef water quality outcomes has not occurred.

#### 6.5 Summary

- Through the Pilot Programme and Phase 2, on-ground management works were implemented in many locations across the GBR catchment. Key achievements of the Pilot Programme included the establishment of a network of project participants across different sites, and in a small number of locations the securing of voluntary conservation agreements. Nevertheless, the effectiveness of the Pilot Programme was limited by the spread of funding across a large range of projects, and the short timeframes involved. It is not apparent that, since 2007, the achievements of all Pilot Programme projects have been maintained. Phase 2, although involving another broad set of wetlands management activities, does not appear to have built directly on Pilot Programme outcomes.
- There was some evidence of strong coordination from the Project Team within the Pilot Programme. However, overall there were opportunities for



better integration amongst the suite of Focus Area 3 projects. One key missing link is that the information and research projects were not able to fully inform on-ground implementation projects – for example, the Wetlands Rehabilitation Guidelines were not developed prior to the on-ground works, and the Adoption of Incentives reports were not able to be accessible publicly.

- The Decision Support System (DSS) was implemented at regional and catchment scales. Feedback on the DSS was mixed, but it is not clear that the use of the Primary DSS in prioritising investment at the regional scale (ie. to inform selection of regions for Phase 2) effectively captured values. However, a key potential impact of the Secondary DSS lies in its use as a tool for consultative decision-making about wetlands management. Care is needed to promote the useability of the DSS tool, whilst managing potential biased results.
- There is limited documentation available about the progress of other projects. Notwithstanding the contribution of these projects to on-ground works, there have been some questions about the appropriateness of some of these projects within the QWP.
- Several legacy issues remain from the set of Focus Area 3 projects. A key gap is that improvements to the knowledge base are still required. Although scientific monitoring was not a focus across Focus Area 3, and on-ground projects were only monitored during the short period of project implementation, consolidation of this monitoring information is required.
- Although there was some evidence that in some locations, the Pilot
  Programme helped build local capacity, there is still an ongoing need to
  further enhance the skills and knowledge base amongst the wide range of
  stakeholder groups both directly and indirectly involved in wetlands
  management.
- Finally, critical outstanding needs still remaining from Focus Area 3 projects are the dissemination of project outputs, and communication of project outcomes. Many important learnings from individual project sites should be shared with the wider Queensland wetlands management community, including through the on-line publication of project reports as well as other networks.



### 7 Education and Capacity Building

The primary objectives of Focus Area 4 projects were to raise stakeholder awareness of the Programme, and provide a range of education and capacity building products and tools for stakeholders to improve the management of wetlands.

This chapter introduces the four Focus Area 4 projects and provides a brief project description. Section 7.2 provides an evaluation of the Focus Area projects in relation to their overall efficiency and effectiveness, and highlights significant achievements and limitations. Key issues relating to the Focus Area 4 projects are discussed in Section 7.3.

#### 7.1 Focus Area 4 education and capacity building projects

There were three GBRCWPP funded projects and one QNHTWP funded project in Focus Area 4. Each of the projects shared the broad objective of raising stakeholder awareness of the Programme, and providing education and capacity building for stakeholders to improve management of wetlands. Many projects in other Focus Areas also had capacity building and education components. Table 7.1 lists each project in this focus area with a brief description of each.

Table 7.1: Summary of Focus Area 4 education and capacity building projects

Project Code	Project Title	Project Description
DPI F01	A Wetlands Module for the Grazing Land Management Education Programme	This project was designed to produce a wetlands module for the Grazing Land Management education package in the near-Reef catchments, to assist the education of landholders about the social, economic and environmental benefits of improved wetland management.
WL EPA 02	Wetlands Management Profiles	The Wetlands Management Profiles project aims to develop information packages that address gaps in information currently available to wetland managers. The profiles will provide practical, on-ground management information on a range of different wetland types/wetland regional ecosystems. The profiles will assist stakeholders recognise and mitigate threats and impacts to their wetlands and to protect and enhance wetland values.
GBRWCPP	Great Barrier Reef Wetland Education Products	<ul> <li>The Great Barrier Reef Marine Park Authority have been engaged to develop a range of educational products to highlight the values of wetlands and their importance in maintaining the Great Barrier Reef. There were five distinct educational products produced as a result of this project:</li> <li>Web Quest – internet based programme that assists students to develop an understanding of wetland values and functions</li> <li>11 wetland information kiosks located at environment information centres in key locations in the Great Barrier Reef catchment, and an on-line version of the wetland software that is in the kiosks</li> </ul>



Project Code	Project Title	Project Description
		A 10 week wetland curriculum unit designed for middle to upper primary school aged children
		A Storythread - an innovative pedagogical approach to environmental education, and
		• The Reef Beat wetland posters series – an educational resource composed of a series of 10 posters and scrapbooks and supported by a booklet.
GBRWCPP	Great Barrier Reef	This project involved the development of a wetlands exhibit in Reef HQ in
	Marine Park Authority	Townsville, an educational tool that will further develop appreciation of the
	Wetlands Display	important role that coastal wetlands play in sustaining the ecological balance of the Great Barrier Reef ecosystem.

#### 7.2 Evaluation of education and capacity building projects

This section evaluates the efficiency and effectiveness of the Focus Area 4 education and capacity building projects. Section 7.2.1 evaluates the projects in relation to project processes, project delivery and project administration. Section 7.2.2 evaluates the Focus Area 4 projects in terms of effectiveness and assesses whether the projects achieved their stated objectives and outputs. The overall effectiveness of the projects in achieving the broad objectives of the focus area, and significant achievements and limitations, are also discussed in this section, along with an assessment table for each project.

#### 7.2.1 Efficiency of education and capacity building projects

The Wetlands Exhibit at Reef HQ to promote understanding of coastal wetlands was a major undertaking. The project involved lengthy negotiation processes to ensure the structural soundness of the proposed construction site with an external structural engineering company. Unexpected major structural changes were also required to be made to the ground floor slab to hold the Wetlands Exhibit. Although scheduled to be open in time for World Wetlands Day (2<sup>nd</sup> of February) in 2006, notwithstanding the unexpected structural challenges, the exhibit opened and was successfully completed in March 2006.

The Wetland Management Profiles project was held up because of delays in acquiring the Programme corporate identity template, and subsequently, transferring profiles into this template for publishing and posting on the EPA website. The late delivery of the template affected the project's ability to meet its 31 December 2005 deadline. This delay also affected project staffing arrangements, as staff were allocated to the project until 31 December 2005, and it was only possible to retain two of the four team members beyond this date, significantly reducing the team's capacity to progress the project.



The costs associated with developing the interactive software for the interactive kiosks were underestimated. The project contract was required to be renegotiated with additional funding provided by the former Australian Government Department of the Environment and Heritage. There were also additional funds required to manage the delays and structural engineering requirements noted above in the Wetlands Exhibit project.

To cover the unexpected costs and increased scope of the project, additional funding was sought from regional NRM bodies in the Great Barrier Reef Catchment, Townsville City Council, James Cook University and NQ Water, as well as from the Great Barrier Reef Marine Park Authority (GBRMPA). Improved collaboration with key stakeholders in the programme was a major benefit of the delay and unexpected costs. The sponsorship that was provided to the GBRMPA to deliver the Exhibit was extended through the other products, such as the interactive booths, scrapbooks and online tool.

#### 7.2.2 Effectiveness of education and capacity building projects

The effectiveness of individual Focus Area 4 projects is summarised in Table 7.2 below. All projects have been successfully completed.

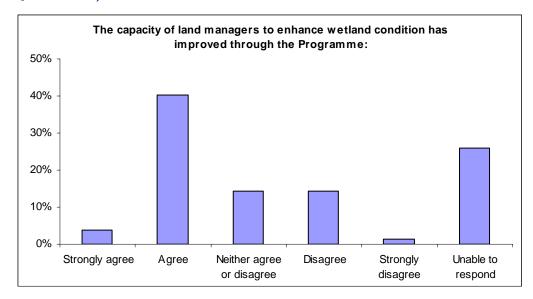
Significant achievements of Focus Area 4 include:

- the development of wetland management profiles to provide practical, onground management information on a range of different wetland types/wetland regional ecosystems
- the development of a wetlands module for the Grazing Land Management education package in the near-Reef catchments
- the construction of a Wetlands Exhibit at Reef HQ in Townsville
- the development of wetlands interactive software and kiosks in key locations in the Great Barrier Reef catchment
- Storythread an innovative pedagogical approach to environmental education, and
- the development of an intensive 10-week wetland education curriculum unit.

A majority of survey respondents chose to "Agree" with the statement that "the capacity of land managers to enhance wetland condition has improved through the Programme" (see Figure 7.1). However, some 28 per cent chose to "Disagree" or "Strongly disagree".



Figure 7.1: Capacity of land managers to enhance wetland condition (Survey Question B17)



#### Education

Several educational products were successfully delivered as part of Focus Area 4. The Wetland Exhibit is located at Reef HQ in Townsville. The exhibit is seen as an important educational tool that assists in the development of a deeper appreciation amongst the community of the important role that coastal wetlands play in sustaining the ecological balance of the Great Barrier Reef ecosystem. The exhibit is also expected to stimulate 110,000 visitors annually to Reef HQ, encouraging visitors to think about their impacts on water quality within the catchments.

The Wetlands Interactive Kiosks were developed under the Great Barrier Reef Wetland Education Products project and have been a valuable tool in increasing the knowledge and understanding among the community of wetland values and their importance in maintaining the Great Barrier Reef. Feedback from users that have participated in the kiosks has been very encouraging and positive, with anecdotal evidence further suggesting that the kiosk is a great educational resource with interesting and useful information.<sup>6</sup>

The other educational programs developed under the Great Barrier Reef Wetlands Education Products project were Wetlands WebQuest, a 10 week wetland

<sup>&</sup>lt;sup>6</sup> Source: Wetland Education Program Final Report 2006, p. 5.



intensive education curriculum unit, Storythread and the Wetlands Reef Beat series and scrapbooks.

Perhaps the most significant educational product delivered was the wetlands curriculum unit "Our Wetlands – A Field Based Research Unit". This intensive 10-week wetland module designed for middle-upper primary aged students was adopted successfully by three Queensland schools, including Townsville Central State School, Rasmussen State School and Tewantin State School. The unit is aimed at developing students' appreciation and the part that students can play in maintaining and conserving wetlands. The curriculum will be available to all schools in 2008. The unit had significant stakeholder support, with one teacher noting that the students were "learning in an interactive way" and that it had resulted in "a change in culture and attitude about interactive learning" amongst other school teachers.

#### **A Perspective**

The school curriculum is good however there is a "need to address the curriculum at the state level"

Local Government Stakeholder

## While the unit was successfully adopted by three state schools, one local government stakeholder noted the strategic "need to address the curriculum at the state level" to further extend school children's understanding about the importance of healthy wetlands. This could be achieved through further promotion and take up of the curriculum by schools throughout Queensland.

The Grazing Land Management Education package was delivered successfully within the stated project timeframe, and demonstrated a strong focus on education and capacity building. The design of the package enables the best current available knowledge to be included as it is updated and future versions are released. However, it remains to be seen how future updates might be funded and subsequently provided. It is unclear at this stage as to the effectiveness of the stakeholder engagement undertaken as part of this project, or whether the package was well accepted by landholders.

# While the adoption of wetland-friendly grazing land management practices is the ultimate goal of the package, the Grazing Land Management Education project recognised that the "powerful financial drivers seemingly incompatible with the need to improve grazing management" is a significant barrier. The final report noted that incentives for landholders to overcome cost constraints may provide a practical solution and possibly address a wide range of sustainable management issues associated with protecting natural resources.

A significant majority of survey respondents that responded chose to "Agree" with the statement that "the Programme has improve stakeholder awareness of wetlands issues" (see Figure 7.2).

#### **A Perspective**

There are "powerful financial drivers seemingly incompatible with the need to improve grazing management"

GLM Education Final Report



The Programme has improved stakeholder awareness of wetlands issues: 70% 60% 50% 40% 30% 20% 10% 0% Agree Neither agree Disagree Strongly Unable to Strongly agree or disagree disagree respond

Figure 7.2: Stakeholder awareness of wetlands issues (Survey Question B14)

#### Capacity Building

Capacity building is traditionally targeted at supporting change in relation to how stakeholders and organisations go about their daily business. In order to have any discernable impact on resource condition, projects aimed at capacity building must be strategically and purposefully targeted. The Rural Industries Research and Development Corporation (RIRDC) capacity building manual describes it as a process designed to help people:

"...understand and manage their changing circumstances thereby improving stocks of human, social, financial and natural capital. It occurs when relevant communities of practice consciously use their stock of human and social capital and their access to financial, physical and natural capital to improve a situation, and improve the stock of capital in the process." (RIRDC 2007, p. 2)

While Focus Area 4 had a stated objective of building the capacity of stakeholders to improve the management of wetlands, there were insufficient projects in this focus area to achieve this objective. Other QWP projects have most definitely assisted with building capacity but as identified there is still a need for further for capacity building and extension.

The two projects in this focus area that emphasised capacity building were the Wetlands Management Profiles project and the Grazing Land Management Education package (discussed above). The Wetlands Management Profiles were designed to assist wetland managers such as landholders and regional NRM bodies



to recognise and mitigate threats and impacts to their wetlands and to protect and enhance wetland values. In doing so, a core group of wetland experts, on-ground managers and other technical experts were consulted to provide input into the development and refinement of each profile.

Despite the engagement of wetland experts and technical experts, some regional NRM bodies have questioned the value of the wetland profiles. One regional NRM body stated that the profiles "are not very useful because we already know the profiles of the wetlands in our region". Another regional NRM body questioned whether the profiles would meet the needs of landholders and extension officers, stating that the profiles contained "far too many words" and that they were "too technical". It was also noted that wetland management profiles were of limited value for wetlands that have already been heavily impacted and modified.

The views of the regional NRM bodies should be noted against the finding in the Wetlands Management Profile Final Report (p. 6-7) which claims that "the profile development process was successful in engaging key stakeholders and obtaining contributions of a technical and practical nature on content and of relevance to the needs of land managers".

The views of the regional NRM bodies suggest that the profiles may have been too broad in the first instance. Going forward, it may be more useful for individual wetland managers to have tailor-made, wetland specific information. Yet it should be noted that in the absence of being able to provide this level of individual wetland information to a range of landholders, the profiles developed in the first instance are a useful starting tool for wetland managers. The project also faces the challenge of continuing to ensure that the profiles are revised periodically as the information contained within them will date.

#### A perspective

While the QWP has developed a number of tools, "a big extension program is required to ensure stakeholders are aware of these tools and understand how to use them"

Industry Peak Body

Overall, while there has been a focus area dedicated to building the capacity of stakeholders and organisations to improve the management of wetlands, it is not yet clear as to how successful this has been in supporting change. This is in part related to the finite nature of many of the projects within the Programme. One departmental officer noted the need for significant follow-up work to be done in communicating and training stakeholders in the use of the products produced as a result of the Programme. Consequently, capacity building and extension will remain a significant priority of any future Programme.



Table 7.2: Assessment of education and capacity building projects

Project Title	Project Objectives	Project Outputs	Assessment and/or
Troject Title	Troject Objectives	Troject outputs	Status
A Wetlands Module for the Grazing Land Management Education Programme	This project was designed to produce a wetlands module for the Grazing Land Management education package in the near-Reef catchments, to assist the education of landholders about the social, economic and environmental benefits of improved wetland management.	Stated project outputs were a wetland module for the Grazing Land Management education package including the development of a participant's guide, technical manual and presentation slides.	The project was completed in 2006, and achieved all stated objectives and outputs.
Wetlands Management Profiles	The Wetlands Management Profiles project aims to develop information packages that address gaps in information currently available to wetland managers. The profiles will provide practical, on-ground management information on a range of different wetland types/wetland regional ecosystems. The profiles will assist stakeholders recognise and mitigate threats and impacts to their wetlands and to protect and enhance wetland values.	The project output was a series of 15 information publications, including 1 overview and 14 specific wetland management profiles.	The project was completed in 2006, and achieved all stated objectives and outputs.
Great Barrier Reef Wetland Education Products	The objective of this project was to develop a range of educational products to highlight the values of wetlands and their important in maintaining the Great Barrier Reef's health.	There were five distinct educational products:  Web Quest — internet based programme that assists students to develop an understanding of wetland values and functions  11 wetland information kiosks located at environment information centres in key locations in the Great Barrier Reef catchment  A 10 week wetland curriculum "Our Wetlands — A Field Based Research Unit" designed for middle to upper primary school aged children  Development of Storythread, and  The Reef Beat wetland posters series and scrapbooks.  Piloting and fine tuning of the wetland curriculum unit designed for middle to upper primary school aged children was undertaken at Tewantin and Rassmussen State Schools.	Wetland kiosks were completed in 2006, with a second tranche of 5 kiosks completed in 2007. The Storythread and curriculum are on track and due for completion in December 2008. All stated project objectives and outputs have been achieved.
Great Barrier Reef Marine Park Authority Wetlands Display	This project involved the development of a wetlands exhibit in Reef HQ in Townsville, an educational tool that will further develop appreciation of the important role that coastal wetlands play in sustaining the ecological balance of the Great Barrier Reef ecosystem.	The major output of this project was a wetlands exhibit at Reef HQ in Townsville.	Project was completed in 2006. All stated objectives and outputs were achieved.



#### 7.3 Key Issues

This section considers several issues arising from the Focus Area 4 projects in terms of integration, consultation, engagement and communication.

#### 7.3.1 Integration with OWP Projects and other initiatives

The Wetlands Management Profiles project had formal partnerships in place with other projects including the Mapping and Classification project, the Information Review and Gap Analysis project, and Improving Wetland Management in Agricultural Systems project, and Resourcing to Support Wetland GBR Nature Refuge Negotiations project.

The Grazing Land Management Education Programme was integrated with a number of other initiatives, including the AgForward program conducted by AgForce, the Coastal Catchments Initiative, the CSIRO Sustainable Ecosystems program, and the Catchment to Reef Project being delivered by James Cook University.

Other QWP projects have also examined aspects of capacity building, such as the Regional Body Wetland Census. However, when discussing capacity building these projects have focused on improving stakeholders' awareness of wetlands issues and stakeholder engagement, which is more closely aligned with communication. While capacity building was a stated objective of the Programme, there may have been a limited understanding of capacity building and the need for such projects to be strategically and purposefully targeted with ongoing extension.

#### 7.3.2 Consultation, engagement and communication processes, legacy issues, implementation strategies

The projects delivered under this focus area generally had fairly robust stakeholder engagement and communication processes. This was evidence in the Regional Body Wetland Census which indentified that:

"Regional bodies have relied significantly on a range of QWP products including the GLM wetlands module, the GBRMPA education products and wetland display. Ongoing provision of educational material was seen as important by most regional bodies and closely aligned with their future needs." (Regional NRM Census 2007, p. III)

During the development of the Wetland Management Profiles project, a core group of wetland experts, on-ground managers and other technical experts were consulted to provide input into the development and refinement of each profile.

Stakeholders, when interviewed, also recognised that there is still significant communication and extension work to be done to ensure the information gained



and the knowledge developed is "passed down to the people on the ground". Many non-government stakeholders (including environmental groups, regional NRM bodies, and industry peak bodies) recognised that while the information and knowledge base for state government has improved, that information and knowledge still has to be further communicated to and used by the many onground decision makers (such as, field staff, regional NRM bodies, industry and landholders). Industry bodies and NRM bodies also noted the significant logistical difficulties of ensuring stakeholders in the far west of Queensland were appropriately engaged and consulted.

#### 7.3.3 Knowledge base and capacity of resource managers

The Grazing Land Management Education Programme improved the information base by consolidating existing and unpublished information regarding grazing management in wetlands into a useable format for landholders. As the Grazing Land Management workshop has been presented to over 300 people in a two year period, the project presents a significant opportunity to develop the wetland knowledge base through future workshops. However, in stakeholder interviews it was noted that there are concerns about whether wetlands are given sufficient attention in the workshops as they are the last module presented and there is a real risk that participants may skip the last elective module.

The Wetlands Management Profiles also contributed to the improvement of the information and knowledge base, as they were designed to assist wetland managers such as landholders and regional NRM bodies to recognise and mitigate threats and impacts to their wetlands and to protect and enhance wetland values. However, as noted above, questions have been raised as to their value to landholders and regional NRM bodies.

#### 7.4 Overall Contribution to QWP

The following section briefly discusses the overall contribution of Focus Area 4 to the Programme in relation to the identified outputs in the MER Strategy (2005).

#### How has awareness of the wetlands issues improved?

Stakeholders' awareness of wetlands issues has improved as a result of the Programme. This is supported by the results of the evaluation survey (see Figure 7.2) and the responses of stakeholders during interviews.

Projects, such as the Wetlands Exhibit at Reef HQ and the range of educational products have improved the public's general awareness of wetlands issues. An opportunity exists to broaden and produce awareness raising projects for other parts of Queensland outside of the Great Barrier Reef region.



Other projects or products in different Focus Areas that are considered by stakeholders as improving the awareness of wetlands issues are Wetland *Info* and the Great Barrier Reef pilot program that involved a series of on-ground activities in the Great Barrier Reef region.

#### How has the ability to identify problems and provide resolutions improved?

The Grazing Land Management Education package has produced a guide and technical manual on the best available practice on wetlands management, assisting landholders on identifying potential problems and resolutions.

The Wetland Management Profiles, while fairly broad in design, assist wetland managers such as landholders and regional NRM bodies to recognise and mitigate threats and impacts to their wetlands and to protect and enhance wetland values.

It is also likely that other QWP projects will also improve the ability of stakeholders to identify problems and provide resolutions in relation to wetlands. For example, the Programme has provided a range of assessment, monitoring and mapping tools, many of which are available through Wetland *Info*.

## How has the capacity for land managers to implement and maintain wetland restoration and conservation measures increased/improved?

The capacity of land managers to implement and maintain wetland restoration and conservation measures has been assisted through the development of the Grazing Land Management Education package and the Wetlands Management Profiles. Both projects provide land managers with technical advice on the best available practice on managing wetlands and recognising and mitigating threats and impacts to their wetlands and to protect and enhance wetland values.

#### 7.5 Summary

- All Focus Area 4 projects were successfully completed, and while some project
  delays and funding issues were encountered, none were serious enough to
  jeopardise the delivery of any of the projects.
- The 10 week wetland curriculum unit "Our Wetlands A Field Based Research Unit" was successfully trialled at three state schools. The strategic challenge will now be to increase the uptake of the curriculum across the state to further extend school children's understanding about the importance of healthy wetlands outside the GBR region.
- While the Wetland Management Profiles developed are a useful starting tool for wetland managers, their value at a site specific scale has been questioned by



regional NRM bodies that have knowledge of local wetlands and consider the profiles were too technical for extension officers and land managers.

- The Grazing Land Management Education package was delivered successfully and enables the best current available knowledge in relation to wetlandfriendly grazing land management practices to be updated as future versions are released.
- While Focus Area 4 had a stated objective of building the capacity of stakeholders to improve the management of wetlands, there were insufficient projects in this focus area to achieve this objective. Other QWP projects have most definitely assisted with building capacity, but there is still a need for further capacity building and extension.



## 8 Communication, Monitoring, Evaluation, Reporting, and Review

This Chapter evaluates how the Queensland Wetlands Programme (QWP) has addressed communication, monitoring, evaluation and reporting (MER), and review (general Focus Area 5). This cross-cutting general Focus Area is vitally important from an accountability, transparency and communication perspective. It provides the impetus for the broad release and promotion of QWP products and tools to stakeholders, and supports the use of feedback and review processes to improve the overall efficiency and effectiveness of the Programme and individual projects.

Adaptive management is an important part of the Programme and is part of both general Focus Area 5 and Focus Area 7 – Integration of and between Focus Areas and adaptive management to continually improve the Programme. Evaluation of the effectiveness of the Programme's use of adaptive management is primarily considered in Chapter 10, although observations are made in all Focus Area chapters.

#### 8.1 Focus Area 5 communication and MER projects

Table 8.1 outlines and briefly describes the four projects in this general Focus Area. The four projects are a mixture of processes (ie. covering the communications strategy and the monitoring, evaluation and reporting strategy), and products (i.e. a regional NRM census and the final Programme evaluation).

Table 8.1: Summary of Focus Area 5 communication and MER projects

Project Code	Project Title	Project Description
WL EPA 07	QWP Communications Strategy Framework	The communications strategy framework was developed in 2005-06 but has been on-going through the life of the QWP. The communications strategy identifies key clients and stakeholders, provides the base "message framework", aligns communications to link to parallel NHT, regional NRM and Reef Plan initiatives, and provides performance measurement tools to evaluate effectiveness of communications. A quarterly communications update is provided to the QWJGT and there is an annual performance review process.



Project Code	Project Title	Project Description
WL NRM 02	QWP Monitoring, Evaluation and Reporting Strategy	The Monitoring, Evaluation and Reporting (MER) Strategy provides the basis for evaluating the implementation of the Programme and links to all focus areas and projects. Development of the MER Strategy would enable a consistent and transparent approach to reporting on the progress and effectiveness of the QWP and individual projects. The MER Strategy outlined that "Every project will be expected to have a communication strategy and participate in the MER process" (p. 4).
WL NRM 05	Regional Body Wetlands Census	This project reviewed wetlands projects being conducted by regional NRM bodies, and evaluated the extent to which the projects aligned with the strategic priorities set by the QWP.
NRM WL 08	QWP Evaluation and Review	This project provides for the evaluation of the effectiveness of the QWP in achieving its goal and objectives. This includes an evaluation and report on the implementation of the MER Strategy. The outcomes of the evaluation will inform senior officers, program and project managers on the effectiveness of the program in terms of the institutional arrangements, alignment, project development and delivery.

The broad summary outputs of general Focus Area 5 are:

- 1. To ensure that products and outcomes of the Programme are disseminated widely and feedback processes used to report on the Programme.
- 2. The MER Strategy for the Programme will develop a consistent and transparent approach to reporting on the progress of implementation, and the effectiveness of the actions invested in for both the Natural Heritage Trust Wetlands Programme and Great Barrier Reef Coastal Wetlands Protection Programme.
- 3. To review and refine the Programme through an adaptive management framework.

The communication output strongly links with Focus Area 4: education and capacity building (see Chapter 7). There are also strong linkages between the MER Strategy and Focus Area 6 in terms of governance and contractual arrangements (see Chapter 9). The review and adaptive management framework output overlaps with the Focus Area 7 emphasis on adaptive management and is discussed in Chapter 10.

In addition to the intended outputs, the MER Strategy (2005) also outlined two key performance measures:

## General Focus Area 5 – Communication, Monitoring, Evaluation and Reporting, and Review

• How has the feedback process refined the Programme?



 How has the MER provided a transparent and consistent approach for reporting on the Programme implementation?

#### 8.2 Evaluation against project and programme goals and objectives

This section evaluates the efficiency and effectiveness of the general Focus Area 5 projects and processes in terms of the general outputs identified within the MER Strategy (2005).

#### 8.2.1 Efficiency of the communication and MER projects

The requirement for a MER Strategy was identified in the Programme Investment Strategy (2004). In December 2004, the JSC noted the proposal to develop a Monitoring, Evaluation and Reporting Strategy for the QWP to be funded under the NHT2 component of the Wetlands Programme and for Australian Government Ministerial approval to be obtained.

The development of the MER Strategy commenced in June 2005 and finished on time in December 2005. Programme funding supported a Department of Natural Resources and Mines Project Officer for the six month period 1 July to 31 December 2005 to prepare the MER Strategy. The project successfully completed all project milestones to budget with reports delivered to the QWJGT ahead of time.

Although the MER Strategy project was completed in late 2005, it was anticipated that review and updating of the Strategy would continue throughout the life of the Programme as part of the MER implementation program. How an appropriate MER and quality management approach is delivered through a large and multi-year programme is considered further below (see Section 8.2.2).

The end-of-project review for the MER Strategy did identify that a difficulty with nominating the members of project teams at the project proposal stage was that there were often several and multiple substitutions of staff members between initial submission of a project proposal and the completion of the project. This could result in a lack of communication and participation by those members who ended up on the teams by default when taking on a new job. It was recommended that it would be best to delay nomination of the team members until the start of the project, and to confirm with the nominated members that they will be available for the greater part of the project term.

In contrast to the MER Strategy, the Programme evaluation project was significantly delayed. The evaluation was approved by the Taskforce in August 2007 and scheduled to begin in late 2007. However, the Programme evaluation was



delayed because of the need for QWP projects to be completed prior to evaluation, and the project did not commence until August 2008 following a competitive tender in June 2008. The Programme evaluation still needed to be completed by December 2008 and this well illustrates the pressures on QWP project teams and other parties to deliver high quality project outcomes often within significantly reduced time periods. For any project, a shortened time period typically increases project risks, for example, that a project will not achieve scheduled milestones or that consultation and engagement may be compromised.

The *Queensland Wetlands Programme Implementation Plan* (2004) outlined that the Taskforce would monitor and consider wetlands initiatives to ensure complementarity of programs and investments across governments. The NRM Census project was subsequently approved by the Taskforce in August 2006 and consultants were commissioned in March 2007 to evaluate the alignment between projects planned or undertaken by the regional NRM bodies and the QWP. This project was completed in November 2007 following incorporation of additional comments by the Steering Committee.<sup>7</sup>

The implementation of the communications strategy framework has been ongoing since mid-2006. In June 2006, a Marketing and Communications Officer was employed within the EPA "to communicate the objectives and outputs of the Programme" (Programme Performance Report 2005-06, p. 2). A range of communication and marketing activities has since been delivered each year with reporting in the Programme annual report. The communications officer position was vacant for a six month period between February and August 2007 and this affected the continuity of QWP communications and project expenditure (see below).

#### 8.2.2 Effectiveness of the communication and MER projects

This section evaluates the Focus Area 5 projects in terms of effectiveness and assesses whether the projects achieved their stated objectives and outputs.

#### **Programme and Project Communication**

There have been some major successes with overall communication of the Programme as documented in Programme annual reports and illustrated by a range of communications products and materials. Examples of these products include:

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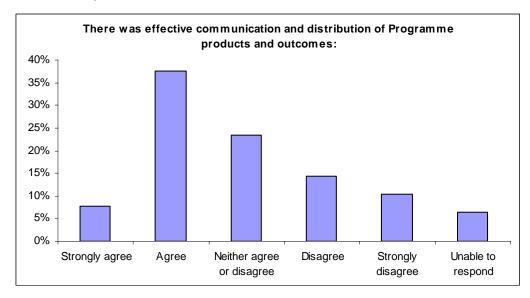
<sup>&</sup>lt;sup>7</sup> See Project Reflection Report 2008.



- articles for newsletters, magazines and reviews e.g. The Bugle a weekly email on NRM news in Queensland
- sponsorship of conferences and major events e.g. of landcare and education conferences
- media releases and Ministerial launches of QWP products e.g. on World Wetlands Day
- capacity building workshops e.g. the roadshows throughout Queensland in mid-2008
- stakeholder tours e.g. Catchment to Coast tours with OceanWatch, and
- information and material on Wetland Info.

The evaluation survey identified somewhat mixed views on QWP communication and product distribution. A majority of respondents chose to "Agree" that "there was effective communication and distribution of Programme products and outcomes" (see Figure 8.1). However, other respondents identified that they could "Neither agree or disagree", or chose to "Disagree", some strongly.

Figure 8.1: Programme communication and product distribution (Survey Question B18)



Since mid-2006, the QWP communications team have built stakeholder relations, raised awareness, developed capacity and demonstrated why it is important to conserve wetlands. One stakeholder observed that the Programme "communicated above its weight and profile". It is evident that there has been a range of



communications successes and the Programme has established a communications presence.

#### A perspective

"Communications was seen as a luxury that was usually tacked on to the end of a project"

Departmental Officer

The MER Strategy (2005, p. 4) identified that "Every project will be expected to have a communication strategy and participate in the MER process." However, one departmental officer expressed the view that "Communications was seen as a luxury that was usually tacked on to the end of a project". It is not apparent that communications was built into every project from the start.

The two year delay with employing a communications officer, the delayed preparation of a communications strategy, and end-of-Programme completion of many projects, have made the communications challenge difficult. With many products only being finalised at the end of the Programme, there is a strong risk that some products and project results may not be adequately communicated to key stakeholders – especially if the Programme was not to continue in some form. As identified in Chapter 7, a significant focus now needs to be placed on further communication of the new wetlands mapping, tools and information.

The size of the Programme with 38 projects and over 75 sub-projects resulted in "vast numbers of clients" with many potential communication avenues. It has taken a long time to get some material out, such as project fact sheets which should have been completed at the start of each project. A local government officer identified that it "Took time to hear of the Programme but any organisation requires perseverance to get to the right person within Council". Positively, it was observed that once QWP officers were contacted there was "a prompt and effective response".

#### A perspective

"In the early days, it was impossible to find out what was going on [in the Pilot Programme].

Project Participant

In comparison to engagement within the GBR Pilot Programme projects, there appears to have been less communication about the Pilot Programme, and Focus Area 3 projects generally, especially to external stakeholders. Furthermore, one stakeholder noted that particularly in the early stages of the project, it was difficult to obtain information from the Department of the Environment and Water about planned project objectives and activities, which affected integration with other activities happening in the region.

A strategic and integrated approach to communications with measureable annual performance objectives and targets was therefore critical for all projects. Communication and extension needed to be built more into all relevant QWP projects and given a higher priority from the start of the Programme. It would appear that a core team of a communications manager, two extension officers and a project officer was justified by the end of the Programme to sufficiently cover



different communications requirements across the two sub-Programmes and across the entire state.

There is potential to further partner with key stakeholders including environment, industry, NRM and local government peak bodies to jointly disseminate and promote the products and results of the Programme. During stakeholder interviews, several peak bodies expressed interest in working with QWP officers to provide a series of targeted articles and other information to members. Existing communication partnerships with Wetland Care Australia and OceanWatch were also commented on as being "good and effective".

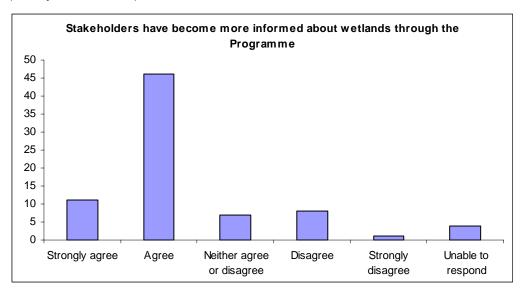
#### A perspective

"Much on the
Wetland Info website —
a powerful tool"
Industry Peak Body
Representative

Stakeholders widely recognise the quantity and quality of information available on Wetland Info. A departmental officer observed that through Wetland Info stakeholders now have "information at their fingertips". Yet despite the "wealth of information", Wetland Info is seen by some stakeholders as complex, given there are over 1,000 webpages and 3,000 links. As identified in chapter 4, some stakeholders have issues with Wetland Info's useability and it being "overwhelming". Issues with navigating the website and understanding where to access specific information has resulted in stakeholders questioning the practicality of the website as a wetland management and conservation tool.

The evaluation survey illustrates that a significant majority of respondents chose to "Agree" or "Strongly agree" in response to the statement that "Stakeholders have become more informed about wetlands through the Programme" (see Figure 8.2).

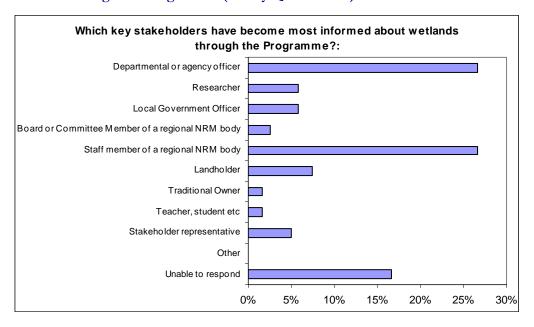
Figure 8.2: Stakeholders have become more informed about wetlands (Survey Question B3)





In terms of which key stakeholders were most informed, Departmental officers and NRM staff were considered by survey respondents to "have become most informed about wetlands through the Programme?" (see Figure 8.3).

Figure 8.3: Key stakeholders that have become most informed about wetlands through the Programme (Survey Question B4)



#### A perspective

"Many people do not know about the website"

Industry Peak Body Representative Further promotion and explanation of Wetland*Info* appears to be essential. In addition, a common theme from stakeholder interviews was a need to present the information in a more sophisticated manner, for example, providing different navigation and entry points for different users. The development of different user portals, for example, for researchers, landholders or students, would improve the focus and useability of Wetland*Info*. For example, a research page would prioritise research, whereas a student page would prioritise information and resources for students. This could be achieved in the next stage of development of Wetland*Info*.

More regular updating and timely lodging of all QWP project outputs and resources would also assist useability. For example, although the Regional Body Wetland Census was completed in late 2007, it is yet to be placed on Wetland *Info*. This risks the information in the report being outdated and ignored even when it is released and yet the Census is a valuable report (see below). Key reports from several of the GBR projects have also yet to be released, such as the Pilot Programme report (see chapter 6).



Although Wetland Info is the primary website for information on the QWP, there is also information available at the Australian Government's Department of the Environment, Water, Heritage and the Arts website. However, there are at least three separate QWP-related webpages on the Department's website with variable information. Two of the webpages contain incomplete listings of QWP projects, inconsistent use of the QWP logo and name, and faulty weblinks. This information needs to be regularly updated to ensure effective communication of the Programme and key products.

The mid-2008 capacity building workshops throughout Queensland were a communications success. The workshops were designed to introduce stakeholders to the Programme and the range of products available. Some 200 stakeholders from a range of organisations and regions attended the workshops.

As identified in the workshops evaluation report, capacity building is a key component of the Programme communications strategy. Capacity building is also a key component of Focus Area 4 – Education and capacity building. The evaluation report identified that further and more targeted training and activities are required and this is supported. Further capacity building and extension remains critical to promote and achieve take-up of the range of Programme tools and information.

#### Monitoring, Evaluation and Reporting

Through the MER Strategy, the Programme established a broad monitoring, evaluation and reporting framework. The MER Strategy was initially developed with "off-line project reporting" using Microsoft Excel templates but this closely mirrored NHT requirements.

The MER Strategy was seen as a good example for other Department of Natural Resources and Water business groups and programs in terms of the content and considerations for developing a MER framework. Importantly, the MER Strategy addresses both high-level questions and includes a number of templates to inform project leaders. However, differences between JSC protocols and the QWP were required to be resolved.<sup>9</sup>

http://www.environment.gov.au/water/environmental/wetlands/programs/qwp.html (all accessed on 3 November 2008).

<sup>8</sup> See: <a href="http://www.environment.gov.au/coasts/pollution/qldwetlands/nhtwetlands.html">http://www.environment.gov.au/coasts/pollution/qldwetlands/nhtwetlands.html</a> and <a href="http://www.environment.gov.au/coasts/pollution/qldwetlands/gbrwetlands.html">http://www.environment.gov.au/coasts/pollution/qldwetlands/gbrwetlands.html</a> and

<sup>&</sup>lt;sup>9</sup> See: MER Strategy Project Review 2006.



#### A perspective

"Clearer targets under each of the focus areas would have been useful"

Departmental Officer

To assist the overall Programme and project monitoring and reporting, it would have been useful if more measurable objectives and targets were built into the MER Strategy. For example, targets for delivery and use of mapping products, delivery of other tools and communications, and the number of users of QWP products.

The MER Strategy project review (2006) identified that it would be "essential that the Strategy is updated both regularly, and in conjunction with any major decisions taken by the QWJGT. A timely trigger to update the strategy would be as the Queensland Wetlands Programme Workplan is developed each year and in conjunction with the completion of the Annual report."

Various reporting templates were amended in March 2007 but it is not clear how often the MER Strategy was actively reviewed and updated. Given the importance of the MER Strategy, a regular review process was essential. It is also not clear if the dialogue and enhanced understanding that was started with the development of the MER Strategy, was continued with further explanation and reinforcement of sound monitoring, evaluation and reporting. While project reporting, evaluation and review is at times burdensome, it is essential for accountability and transparency of the expenditure of public funds and to assess achievements against budgets, milestones and targets.

QNHTWP projects used a range of project administration and reporting templates. This assisted efficient and consistent project level reporting. Alternative processes were used for GBR project administration and reporting.

Financial reports were required quarterly and project progress and financial reports on a six monthly and annual basis for the QNHTWP projects. These progress reports were based on reporting templates initially based on the MER Strategy (EPA 2005), and later the enQuire on-line project reporting system (see below). This required project details relating to key achievements for the period, milestones achieved, variances against milestones and project risks. Programme administration and reporting was advanced with the recruitment of a QWP coordinator in May 2006, and introduction of the enQuire project management and reporting system in 2007 (also see chapter 9).

In the first half of the Programme from 2004 to mid-2006, the level of detail provided in the performance reports could have been improved. For example, in relation to project milestones, the level of detail provided made it unclear as to exactly what was the performance of the project in regards to achieving the scheduled milestones for that period. Additionally, the level of detail provided on



project delays could have been improved. Often the reports provided little detail as to the underlying cause of the delay, what strategies were taken to manage the delay, and what action would be taken to ensure the project remained on track.

There were also issues with alignment of project proposals and the six month and annual performance reports, with milestones in the project proposal not necessarily aligning with the reported milestones in the performance reports, and milestones appearing to be 100 percent complete in one year and then partly completed in the following year. The introduction of standardised Programme contracts and reporting from 2007 in line with general NHT-funded project reporting improved the consistency and quality of reporting (refer to Chapters 9 for further discussion of Programme reporting arrangements).

Although there have been defined administration and reporting procedures for the ONHTWP:

- Some project proposals did not contain clearly specified objectives but rather listed tasks (e.g. WL EPA 04)
- Other project proposals did not specify outputs (e.g. EPA WL 10).
- In the first half of the Programme, there was unclear alignment between project proposals and performance reports e.g. differences with project numbers, project milestone numbers, and articulation of project goals and purposes. This was addressed with the introduction of a new management and reporting system in 2007.

From March 2007, the NHT-funded QWP projects were built into enQuire, the standard NHT contract and reporting system in Queensland (see box 8.1). The enQuire management system is administered by the Department of Natural Resources and Water.

#### Box 8.1: enQuire

enQuire is a web application providing a convenient (central) system to use stored and real time information about natural resource management activities in Queensland. enQuire provides authenticated users with specific functionalities according to their role and credentials. It incorporates four key areas: contract management; project management; reporting tools; and communication.

#### A perspective

"enQuire is relatively simple, but not perfect and had some limitations"

Departmental Officer

One departmental officer observed that enQuire is "relatively simple, but not perfect and had some limitations". Another officer observed that it requires "time to use it and get used to it." Any management system takes time and resources to



be used efficiently. However, the significant advantage of using enQuire was that it provided a standardised system for contract administration and reporting. While it appears that the functionality of getting information into and out of the system could be improved, it has assisted with improving reporting against milestones between the first half and the second half of the Programme.

The evaluation survey illustrates that respondents broadly "agreed" or were neutral in response to the question that "Programme reporting processes provided relevant information on overall progress and achievements" (see Figure 8.3). The large number of "Unable to respond" responses reflects those stakeholders outside of immediate monitoring and reporting requirements.

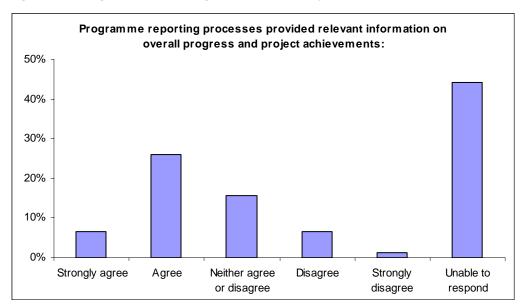


Figure 8.3: Programme reporting processes (Survey Question B24)

The role of the QWP programme coordinator has been important in improving Programme administration and reporting – especially for the QNHTWP projects. This is further discussed in Chapter 9.

The QNHTWP projects generally involved a documented process of project proposals, quarterly, six-month and annual reporting and end-of-project "reflection reviews". All GBRCWPP projects were administered through standard contracts with milestones and milestone reports being required to be achieved before any payments made. However, there was considerably less information on GBRCWPP projects in each QWP Annual Report that reduced the level of accountability and transparency across the entire Programme.



For example, one industry participant on the Project Steering Committee for the GBR Pilot Programmes asked: "how did the projects go? What were the learnings and outcomes? Where was the monitoring and evaluation?". Although extremely interested, the stakeholder had not been informed of the final outcomes of the project and the final project report was only recently released.

The 2007-08 Programme performance report identifies that: "GBRCWPP projects are not as expansively dealt with as the NHT2 projects as projects funded by the GBRCWPP do not require performance reporting through the JSC". It is acknowledged that the GBRCWPP is a Departmentally funded programme but it was part of a joint initiative. The problem that emerges is that there is no overall annual report on Programme performance covering both sub-programmes with similar levels of disclosure.

In effect, two separate reporting and evaluation processes were used which does not assist overall evaluation of Programme performance, efficiency and effectiveness. Although some indication of progress on QNHTWP and GBRCWPP projects was outlined in the annual Programme performance report, more information needed to be provided on all projects to enable a consistent and cross-Programme view of achievements and effectiveness. A more integrated and consistent approach was required with overall Programme reporting and evaluation to be able to consider "the complete picture" of the Programme's collective achievements and total performance.

#### Regional Body Wetland Census

The Census project reviewed and evaluated the extent to which Regional NRM Body activities in Reef and non-Reef catchments contribute to the QWP objectives. An important section of the Census was the identification of key opportunities and ways forward for wetland management by regional NRM bodies (see box 8.2).

### Box 8.2 Key opportunities for wetland management by regional NRM bodies

Key opportunities for wetland management by regional NRM bodies were (2007, p.115-116):

- continuing to build the collaborative partnerships with key stakeholders involved in wetland management and related activities
- continuing to improve land management practices to address wetland management and protection outcomes



- building a Wetlands Network amongst regional body practitioners involved in wetlands work to share information and support across the State
- raising awareness, improving the capacity of staff and stakeholders in the business and filling the knowledge gaps that exist in baseline and other resource information to assist management
- improving integration and coordination of programs, funding and initiatives to improve the effectiveness of resources that are available to regional bodies
- refining prioritization processes based on improving wetland inventory and management data sets
- focusing on wetland connectivity at the local and regional scales
- continuing to build comprehensive incentive schemes to mobilize the efforts of the community
- ensuring adequate and effective resources are allocated to wetland management activities
- supporting research, monitoring and evaluation efforts to increase regional body understanding of wetland management activities
- supporting the development of statutory protection mechanisms by the relevant agencies, and
- supporting reporting mechanisms that allow information gathering to improve understanding of what is being achieved from investment activities.

Not surprisingly, many of these "opportunities" have also been further identified as part of this overall Programme evaluation (also see Chapter 12). In particular, there has been a consistent demand for further partnerships, the creation of a wetlands network, increased extension and communication, provision of incentives and continued resourcing of the Programme (or a successor).

The NRM census could be repeated in three years to gain further understanding of how regional bodies are responding to the Programme products and information, and importantly, how investments and activities are being undertaken to improve wetland management. Further, a similar census or stocktake could also be conducted of Queensland Departments responses to wetland management, and especially of local government. For the local government census, a representative sample of councils across the state and in priority areas may need to be considered.



#### 8.3 Assessment against stated objectives and outputs

Overall, the projects and processes within this Focus Area have been a success. However, as discussed in this chapter, there are opportunities to be more strategic and further integrate communications into all projects, and reinforce the importance and improve monitoring, evaluation and reporting.

In terms of the two key performance measures in the MER Strategy, there are examples of where feedback processes have refined and improved the delivery of the Programme. For example, the mid-term review of priority projects for the second half of the Programme illustrates how feedback processes informed project selection and delivery. The commissioning of second stages of key projects also highlights how feedback processes were used to influence project selection. NHT-funded project contract and reporting processes have also evolved and improved through the life of the Programme.

The MER Strategy provided a transparent and consistent approach for reporting on Programme implementation, especially for NHT-funded projects. Regular reporting on milestones, achievements and financial performance is critical to ensure appropriate oversight and due accountability and transparency.

While there has been regular reporting of the NHT-funded projects, there has been more limited reporting and evaluation of the GBRCWPP projects. This does not assist the overall assessment of Programme performance and outcomes, especially by the Taskforce (see Chapter 9). It also increases the risk that the various QNHTWP and GBRCWPP projects will not be fully integrated across the Programme (see chapter 10). A more consistent approach to total Programme reporting and evaluation was required.

Table 8.2 outlines the stated objectives and outputs of each project in general Focus Area 5, with a brief assessment of whether each project achieved those stated objectives and outputs.

Table 8.2: Assessment of Focus Area 5 projects against stated objectives and outputs

Project Title	Project Objectives	Project Outputs	Assessment
QWP Communications Strategy Framework	To provide specialist communication capacity to support the QWP by serving the needs of the sponsoring government ministers, the supporting government departments and the project managers delivering QWP funded projects.	Communications expertise to promote delivery of the QWP Communications Strategy	Specialist communications expertise was provided from mid-2006 but there was a capacity gap for six months in 2007.  A range of communications products have been provided to promote the Programme



Project Title	Project Objectives	Project Outputs	Assessment
	Providing clear and effective communications and advice to stakeholders and the community regarding the objectives and outputs of the QWP  Broad objective: To increase stakeholder engagement and raise awareness of the objectives and outcomes of the QWP		and key products.  With many products only being released in late 2008, it will be important for a strong focus on communications to continue to ensure sufficient stakeholders learn of the outcomes of the Programme.
Monitoring, Evaluation and Reporting Strategy	Ensure consistency of the Strategy with the existing National and Queensland natural resource management (NRM) monitoring and evaluation frameworks.  Ensure consistency with, and linkages to, the Reef Plan MER Strategy.  Define the reporting requirements for the Wetlands Programme MER Strategy and the associated timelines for evaluation and reporting.  Identify indicators for evaluating the effectiveness of Wetlands Programme actions.  Identify linkages with data collected from other partners (eg. Local Government, regional NRM Bodies and industry).	Agreed MER Strategy including:  Identified content and regularity of progress reports.  Identified processes and timing for reporting mechanisms to the QWJGT, Reef Intergovernmental Steering Committee, the JSC, the NHT, NRM and Reef Ministerial Councils, Minister for Department the Environment and Heritage.  Identified potential data sources and transfer mechanisms.  Recommended data storage and reporting systems.  Recommended a communication process for reporting to stakeholders and the community.	The MER Strategy was an essential project for such a large and complex Programme.  The initial development of the MER Strategy provided a strong impetus for quality monitoring, evaluation and reporting.  However, there have been clear differences in the quality and timing of QNHTWP and GBRCWPP projects and subsequently Programme reporting. More information was required on the GBRCWPP projects.  The MER Strategy would have benefited from more regular review and the insertion of stronger targets and objectives to assess performance.
Regional Body Wetland Census	To review and evaluate the extent to which Regional NRM Body activities in Reef and non-Reef catchments contribute to the QWP.  Classify these activities according to: - scope (achievements, in progress and challenges); and - adequacy (prioritised and funded).  Document the findings in a format that enables the QWP Joint Government Taskforce to utilise the outcomes for strategic decision making and investment.  Make recommendations that improve opportunities to build	(i) A context review of how regional NRM bodies are approaching the investment of management actions and activities that support the objectives of the QWP.  (ii) A reporting procedure to facilitate easier collation and linking between state-wide activities and the QWP.  (iii) Identification of potential synergies and recommendations for improved relationships and alignment with regional NRM bodies.	The Regional Body Wetland Census was completed in late 2007 and is a valuable assessment of how regional NRM bodies are contributing to the QWP objectives.  The final project report should be released to ensure maximum value from the project.



Project Title	Project Objectives	Project Outputs	Assessment
	better partnerships with Regional NRM Bodies in the delivery of outcomes for wetlands in Queensland.		
QWP Evaluation and Review	Evaluate the effectiveness of the Programme's projects in meeting their stated objectives and overall contribution to the Programme's stated goal.  Evaluate the effectiveness of the arrangements and processes used by the Programme including consultation, engagement and communication processes, legacy issues and implementation strategies.  Document the contributions and relevance of the Programme to improve the knowledge base and capacity of resource managers in relation to wetland management in Queensland.  Document the key learnings and the key factors for success for future collaboration in wetland management.	Draft report     Final report	The evaluation was commissioned in August 2008 and is scheduled to be completed in December 2008.  The evaluation is considering the effectiveness of QWP projects and key aspects such as, arrangements and processes, knowledge base and capacity, key learnings and key factors for success.  The evaluation has been somewhat limited by the number of QWP projects that are still being finalised.

#### 8.4 Summary

- Overall, the projects, arrangements and processes within this Focus Area have been successful. However, there are opportunities to enhance and further integrate communications across the Programme and all projects, and to further improve monitoring, evaluation and reporting of Programme and project performance.
- The communications strategy framework was prepared in mid-2006. There have been some major communications successes as illustrated by a range of products and materials. However, the two year delay with preparing a strategy, employing a communications officer, and the end-of-programme timeframe for many projects, have made the communications challenge difficult. Significant attention still needs to be given to further communication of new wetlands mapping, tools and information. Further promotion and refinement of Wetland Info is also important.
- The development of the Monitoring, Evaluation and Reporting Strategy in late 2005 was important to provide a consistent and transparent framework for the



Programme. The Strategy could have been enhanced with more measureable objectives and targets. While reporting and evaluation is at times "burdensome" and challenging, it is essential for accountability and transparency, and assessment of achievements against budgets, milestones and targets.

- Differences have been observed through this evaluation between monitoring, reporting and evaluation for the QNHTWP projects compared with the GBRCWPP projects. The QNHTWP projects generally involved a documented process of project proposals, quarterly, six-month and annual reporting and end-of-project "reflection reviews". In contrast, there was a general lack of information on reporting and evaluation for many of the GBRCWPP projects. The lack of a detailed annual performance report covering all QNHTWP and GBRCWPP projects does not assist overall evaluation of Programme performance, efficiency and effectiveness. A more consistent approach to total Programme reporting and project evaluation was required.
- The commissioning of the Programme evaluation project was delayed until other QWP projects had been progressed. The project was approved in August 2007 but the project did not commence until August 2008 following a competitive tender in June 2008. The Programme evaluation still needed to be completed by December 2008 and this well illustrates the pressures on QWP project teams and other parties to deliver high quality project outcomes often within significantly reduced time periods. For any project, a shortened time period typically increases project risks, for example, that a project will not achieve scheduled milestones or that consultation and engagement may be compromised.
- The Census project reviewed and evaluated the extent to which Regional NRM Body activities contribute to QWP objectives. An important section of the Census was the identification of key opportunities and ways forward for wetland management by regional NRM bodies. Not surprisingly, many of these "opportunities" have also been further identified as part of this overall Programme evaluation. In particular, there has been a consistent demand for further partnerships, the creation of a wetlands network, increased extension and communication, provision of incentives and continued resourcing of the Programme (or a successor).
- The NRM census could be repeated in three years to gain further understanding of how regional bodies are responding to the Programme



products and information, and importantly, how investments and activities are being undertaken to improve wetland management. Further, a similar census or stocktake could also be conducted of Queensland Government Departments responses and approaches to wetland management, and especially local government responses.



# 9 Governance and Contractual Arrangements

This chapter evaluates the effectiveness of Queensland Wetlands Programme (QWP) governance and contractual arrangements, and considers how these key processes have influenced Programme and project products and outcomes.

#### 9.1 Programme governance

There are many definitions and interpretations of governance. At one level, governance is the systems or processes adopted for directing and managing the business and activities of an organisation. Governance also refers to the systems and processes for ensuring accountability, probity and transparency in the conduct of an organisation's business and activities.

In a report on best practice programme implementation, the Australian National Audit Office observed:

"Governance is the set of responsibilities and practices, policies and procedures, exercised by an agency's executive, to provide strategic direction, ensure objectives are achieved, manage risks and use resources responsibly and with accountability. Sound governance arrangements are critical to the success of programme and policy implementation." (ANAO 2006, p. 13)

For the QWP, governance is important from a number of perspectives, given the joint government, multi-year and multiple project nature of the Programme. This includes the roles, responsibilities and accountabilities of those involved, the rules and procedures for decision-making, and the integration of the project governance arrangement within broader corporate governance frameworks of lead agencies.

Key governance bodies involved with the Programme are:

- Joint Queensland and Australian Government NRM Steering Committee (JSC).
- Queensland Wetlands Joint Government Taskforce (QWJGT).
- Queensland Wetlands Joint Government Taskforce Working Group (QWJGTWG).

Senior executives from lead agencies, primarily Australian Government Department for the Environment, Water, Heritage and the Arts, and the Queensland Government Environmental Protection Agency and the Department of Natural Resources and Water have key governance roles.



The Queensland Wetlands Joint Government Taskforce (QWJGT) has a particularly important role with Programme governance. The initial 2004 Terms of Reference for the Taskforce cover programme design, stakeholder engagement, review and reporting.

### Box 9.1 Queensland Wetlands Joint Government Taskforce Terms of Reference (2004)

- To oversee the design and implementation of the Great Barrier Reef Coastal Wetlands Protection Program and the NHT Wetlands Program including:
- o preparation of a consolidated workplan, which may include development and implementation of strategies for:
  - communications
  - consulting stakeholders
  - monitoring and evaluation
- o identification for priority actions;
- o selection of actions for joint investment;
- o determining joint investment arrangements;
- o managing investment decision-making through the relevant processes; and
- o instituting appropriate program monitoring and evaluation.
- To engage, inform and consult with relevant stakeholders including the Reef Water Quality Protection Plan Operational Committee and the Joint Australian Government/State NRM Steering Committee, as appropriate.
- Ensure that, wherever practical, initiatives under these Programs are coordinated and integrated with other natural resource management initiatives relating to wetland conservation and management.
- To review and report on the two Programs in accordance with the Reef Plan implementation review process and the NRM monitoring and evaluation framework.

The QWJGT is responsible for endorsing or approving various Programme strategies and processes including:

 The overall Investment Strategy for the Queensland Wetlands Programme (November 2004) covering funding allocations for both the Queensland Natural Heritage Trust Wetlands Programme (QNHTWP); and the Great



Barrier Reef Coastal Wetlands Protection Programme (GBRCWPP) (see box 9.2).

- The Administrative Protocol for the Programme [NHT2] (approved by the JSC at the meeting No. 29 on 21/22 August 2006 see below).
- The Queensland Wetlands Programme In-kind Contributions (NHT2 funded) Queensland Acquittal Process, approved by the QWJGT on 27 March 2007.

#### Box 9.2 Investment Strategy for the Queensland Wetlands Programme

The investment strategy outlines (November 2004):

- the objectives of the respective programmes
- the strategy to guide investment under the QNHTWP and the GBRCWPP
- the investment criteria that will underpin investment decisions (as adopted from existing Trust Extension criteria and strategies contained within the Reef Water Quality Protection Plan (Reef Plan), and
- investment categories and priorities for the NHTWP and the GBRCWPP.

Appropriate Programme governance and oversight, and efficient administrative processes, have been concerns for some years. There have been several attempts to improve processes and project delivery but problems have remained.

In December 2005, the Joint Queensland and Australian Government NRM Steering Committee (JSC) requested the Australian Government prepare a paper proposing options for streamlining administration of the Queensland Wetlands Programme for out of session consideration by the JSC. A paper was also to be prepared in relation to improved coordination between programmes for consideration by the JSC.

At the June 2006 meeting, the JSC was provided with a verbal report on the QWP administrative arrangements which had been negotiated across both governments by the Wetlands Taskforce Co-chairs. The JSC agreed to refer the proposal, in the form of an out-of-session JSC paper to the co-chairs for endorsement.

Subsequently, in August 2006, the JSC, in relation to the NHT component of the QWP (i.e. the QNHTWP):

1) endorsed the reconstitution of the Taskforce as a sub-committee of the JSC, with the co-chairs of the Taskforce as JSC members.



- 2) agreed, that as a subcommittee of the JSC, decisions of the Taskforce will in effect be decisions of the JSC and will be recorded as such using established protocols and systems.
- 3) agreed, that as a subcommittee of the JSC, decisions of the Taskforce will be limited to:
- a. recommending investments to Ministers under the NHT component of the QWP.
- b. approving requests for variations and/or recommending variations to Ministers where these involve changes in funding for activities.
- c. agreeing, on an annual basis, Queensland matching funding contributions under the NHT component of the QWP.

Notwithstanding the above agreements and processes, there have been ongoing Programme governance and resulting project management and delivery challenges. As outlined in Chapters 4 to 8, many projects have required extensions, in part because of considerable delays with obtaining project approval, preparing contracts, and commissioning individual projects. However, other projects have required extensions because they have not been able to meet anticipated project milestones, for example, because of staff turnover or adverse weather.

Various stakeholders interviewed during this evaluation noted problems with project approval and contracting processes, with a number of significant delays in gaining approvals and finalising legal contracts. One departmental officer observed that there "were many layers of governance – perhaps too many layers". However, it was also acknowledged that the current project administrative process provides strong accountability and transparency.

At the start of 2008, a significant risk was that many QWP projects would not be completed by the scheduled end of the Programme in June 2008. In part, this was because although announced in 2003, the Programme did not effectively start until the end of the first year and little funding was spent in 2003-04.

In February 2008, the Working Group reviewed the Programme report for 1 July – 31 December 2007, all individual Project reports and detailed financial reports for current projects, and reported to the QWJG Taskforce that a number of projects were not meeting their scheduled timeframes. However, it was considered that these projects would be able to be completed if extended timeframes were granted. The QWJG Taskforce reviewed the QWJGT Working Group report and agreed to forward a request to the JSC for project extensions.



At the February 2008 meeting of the JSC, concern was also expressed about project delivery in terms of:

"... ongoing challenges within Queensland government processes (noting that the majority of the Queensland Wetland Program projects are delivered by Queensland agencies) that had resulted in delays to commencement and delivery of a number of projects. ... that this inevitably resulted in requests for extensions of the timelines for delivery. ... that careful consideration be given to how to avoid these problems in any NHT/NAP successor programs that relied largely on government agency delivery." 10

The JSC agreed that the need for extensions to projects in the future should be discouraged except where those extensions related to projects supporting the proposed changes in the Queensland regulatory regime with respect to the management of Wetlands as set out in Clause 24 of the Bilateral.

An important role for the Taskforce and Working Group was maintaining oversight to ensure project delivery on time and to a required standard. However, it is not apparent that either body has been able to sufficiently perform this role. While there was a review in February 2008, there was a significant risk that this was leaving the review too late, and it needed to be undertaken at least 18 months before the scheduled end of the Programme. The Taskforce also needed to exert more control over the delivery of projects. For example, a departmental officer was not aware that the Taskforce ever "demanded that projects get back on track".

A related factor was that a significant number of projects were only identified and started in the fourth and fifth years of the Programme. While it was important to get the large base projects, such as the mapping and inventory projects, progressed in the first half of the Programme, more projects needed to be commissioned earlier. A major project review was held in late 2006 to identify and prioritise the use of remaining QNHTWP funding (see Box 9.3), but again this was arguably too late to allow for sufficient project time and complete delivery before the scheduled end of the Programme.

The Taskforce could have assisted in providing further leadership across departments and agencies to ensure the efficient commissioning and contracting of projects. It also needed to schedule critical review processes earlier in the Programme.

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<sup>10</sup> Minutes of the Joint Queensland and Australian Government NRM Steering Committee, 26-27 February 2008.



## Box 9.3 Overview of Process for Addressing Remaining NHT2 Funding for the $QWP\$

In August 2006, the Taskforce directed the Working Group to prepare a priority list of proposals for 2006-07 and 2007-08, set priorities, and package these to use up the remaining budget, and the "Working Group to develop proposals for 2006-07 and 2007-08 in line with list of priorities". The Working Group held a workshop in September 2006 to undertake a strategic planning process to identify indicative projects which may be required to fill gaps in the QWP and to address the decision and actions of the QWJGT.

The Working Group agreed on a prioritisation process for new projects and identified those areas requiring new projects to be developed. In addition, indicative allocations of funding were put against these projects. No clear process was established at the workshop for developing the project proposals, however, subsequent discussions with working group members resulted in a number of project proposals being developed and others being proposed for future consideration.

At a subsequent meeting in October 2006, the Working Group agreed to a two stage process for project development for the remainder of the QWP, involving detailed project proposals and project synopses and indicative project development timelines. This was recommended to the QWP Taskforce as the process for finalising projects under the QWP.

#### Governance and administration processes

Key processes including the in-kind acquittal process and project quality assurance process were completed and approved in 2007 and April 2008 respectively. Ideally, these processes would have been determined in the first year of the Programme to influence all project reporting and finalisation of products. A risk assessment component was also required as part of the quality assurance process.

#### A perspective

"There has been burnout amongst the Working Group and project managers... the workloads have been very high."

Departmental Officer

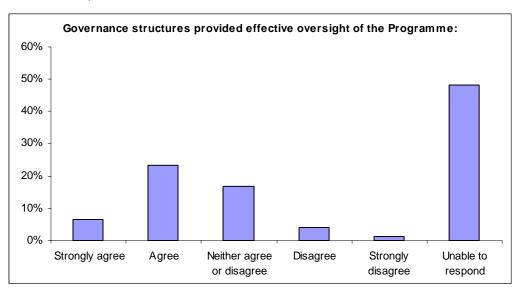
Although processes were in place for progress on projects to be monitored, a Working Group member noted that due to high workloads, project reports were not always read by all members. This limited the ability of the Working Group to ensure projects remained within time or to ensure consultants were guided sufficiently.

Respondents that answered the evaluation survey question "Governance structures provided effective oversight of the Programme" primarily "Agreed" or were "Neutral" about the statement (see Figure 9.1). However, a significant number of



largely external respondents with less knowledge of the Programme were unable to respond to the statement.

Figure 9.1: Governance structures and Programme oversight (Survey Question B22)



#### 9.2 Contractual arrangements

Sound and efficient contractual arrangements are important for any project, but especially for a multi-year programme with many different projects, some large, and many interested stakeholders.

"Contracting is now a fundamental part of how we do business. As a result, effective management of contracts of whatever size and for whatever purpose is an essential requirement for most, if not all, public sector programs. It is however an aspect of administration that has not always been given the focus and attention it deserves." (McPhee 2006).

In March 2007, there was a major overhaul in contractual arrangements as there had been many inconsistencies between contracts with regard to structure and detail for all NHT projects including the QNHTWP projects. The new arrangements included standardised contract information, reporting templates and use of an on-line contract management and reporting system – enQuire (see Chapter 8).

Any multi-year joint government initiative as large and complex as the QWP will inevitably encounter some project delays. However, a number of these delays may have been able to be avoided. Project planning was affected by the time to receive



approvals and finalise contracts, and project milestones were not able to accommodate delays of four to six months. That said, many project managers worked hard to deliver on project milestones and commitments.

Project planning could have benefitted from greater use of risk mitigation planning. Risk mitigation planning can assist project managers in identifying project risks and developing strategies to ensure the potential impact on the project is minimised. There was limited evidence of projects referring to or implementing risk mitigation plans as part of sound project management. Risk mitigation strategies, if designed and implemented appropriately, may have improved the outcomes achieved under different Focus Areas, and avoided or mitigated some of the project delays experienced.

One departmental officer observed that "the timelines for QWP projects were not realistic" given the time required to get projects approved and contracts prepared and signed. Contracts were four to six months out of date by the time that they were processed. There was a need to be pragmatic with establishing contracts and considering what could be progressed within legal and drafting timeframes.

Concerns were also expressed about Australian Government approval and signoff. Some departmental officers suggested that Australian Government departmental approval was the biggest constraint as an "unreasonable level of detail was wanted" even where minor changes were sought to the project scope of the level of funding (the attention and detail was disproportionate to the size of the project). This contributed to delays in getting project sign-off, which in turn resulted in doubt when to start a project, and what resources to employ.

Concerns were also noted about the additional time taken for Queensland interagency negotiations, and particularly legal approval and clearance. Considerable delays were encountered with even variations to contracts because of Queensland departmental legal processes.

One departmental officer suggested that the contractual arrangements and administrative processes did not have "a major impact on delivery of projects". However, there was a trade-off with the "amount of time spent resolving contractual issues and the time lost that could have been spent on more strategic work". Several stakeholders did observe that the QWP project funding and reporting processes were more complicated than comparable NHT funding and reporting processes from a regional NRM body.



The Programme Manager and Coordinator had important roles in ensuring efficient administration and reporting of the Programme, and especially the 28 QNHTWP projects. Many strong and supportive comments were made about the performance of the Programme coordinator and the importance of this position. This position was appointed in mid-2006 but many of the processes were required from the start of the Programme. This position required funding from the start of the Programme and this would have assisted the early development and use of the MER Strategy.

Guidance was provided to project managers on a range of matters including the "Queensland Wetlands Programme Administrative Procedures – Approval process for performance reporting and progress funding for the Queensland Wetlands Programme and the Queensland Wetlands Programme Projects of the Natural Heritage Trust Extension Wetlands Programme [NHT2]" (April 2008). Figure 9.1 outlines the process for progress reporting on the QNHTWP projects.

Respondents that answered the evaluation survey question "Contract design and approval processes were efficient and appropriate" primarily "Agreed" or were "Neutral" about the statement (see Figure 9.2). Again, a significant number of largely external respondents with little direct involvement with individual projects were unable to respond to the statement.

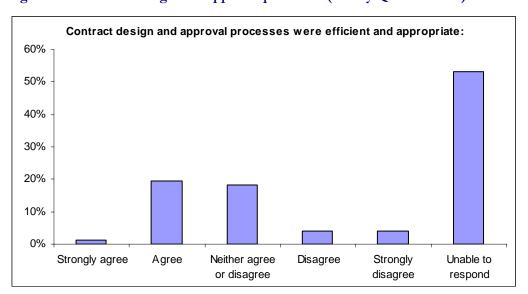
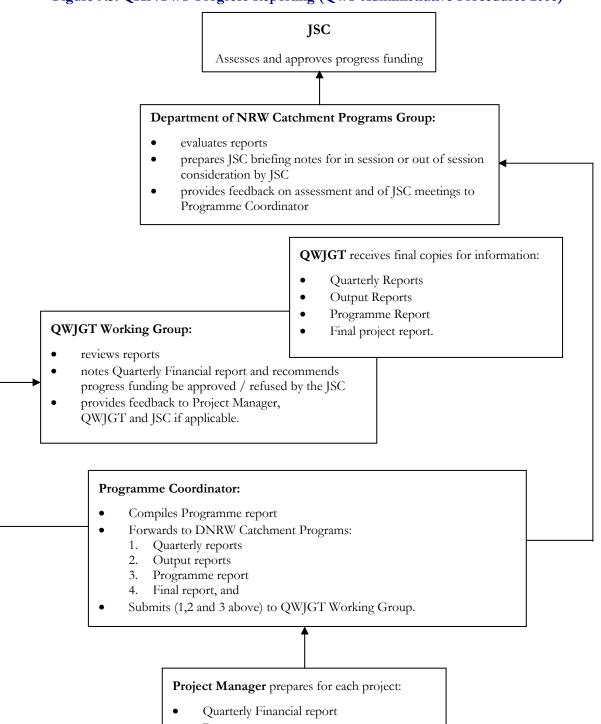


Figure 9.2: Contract design and approval processes (Survey Question B23)



Figure 9.3: QHNTWP Progress Reporting (QWP Administrative Procedures 2008)



- Progress report
- Output report
- Final Report.

and submits these to Programme Coordinator.



#### 9.3 Assessment against Focus Area outputs

The Terms of Reference for the evaluation outlined three outputs or key performance measures to assess governance and contractual arrangements.

#### What is the process of contract design and approval? Is this appropriate?

Contract design and approval for the QNHTWP projects, and especially finalisation of legal contracts, is a time consuming and lengthy process. This has caused long delays in the commissioning of QNHTWP projects and impacted on project and Programme delivery. More efficient processes were required. Contract design and approval for the GBRCCWP has been more straightforward and projects, such as the Pilot Programme, have been able to be more easily commissioned and delivered.

#### Has the governance arrangements structure been appropriate?

The governance arrangements structure is complex but this is reasonably typical of a large, multi-year joint government programme. Arguably, the Taskforce was required to have a stronger role and questions remain as to whether the Taskforce and Working Group were both required.

### Have reporting processes been appropriate to provide information on the progress and achievements of projects to investors?

Reporting processes have provided a range of information on milestones and achievements to investors and other stakeholders. However, more information about actual Programme and project performance to consistent milestones through the life of the Programme was required. An assessment of whole-of-programme performance is somewhat difficult to make given different reporting requirements and levels of information for the GBRCCWP and QNHTWP projects, and also delays with completion of many projects.

#### 9.4 Summary

- For the QWP, governance is important from a number of perspectives given the joint government, multi-year and multiple project nature of the Programme.
- Notwithstanding well documented processes and terms of reference, there have been ongoing Programme governance, and resulting project approval, management and delivery challenges.
- As outlined in Chapters 4 to 8, many projects have required extensions, in part
  because of considerable delays with obtaining project approval and
  commissioning of individual projects. However, other projects have required
  extensions because they have not been able to meet anticipated project
  milestones.



- An important role for the Taskforce and Working Group was maintaining oversight to ensure project delivery on time and to a required standard. However, it is not apparent that the Taskforce and Working Group have been able to sufficiently perform this role.
- While there was a major review of deliverables in February 2008, there was a significant risk that this was leaving the review too late, and it needed to be undertaken at least 18 months before the scheduled end of the Programme. The Taskforce also needed to exert more control over the delivery of projects.
- A related factor was that a significant number of projects were only identified and started in the fourth and fifth years of the Programme. While it was important to get the large base projects, such as the mapping and inventory projects, progressed in the first half of the Programme, more projects needed to be commissioned earlier. A major project review was held in late 2006 to identify and prioritise the use of remaining QNHTWP funding but again this was arguably too late to allow for sufficient project time and complete delivery before the end of the Programme.
- The Taskforce could have assisted in providing further leadership across
  departments and agencies to ensure the efficient commissioning and
  contracting of projects. It also needed to schedule critical review processes
  earlier in the Programme.
- Key Taskforce processes including the in-kind acquittal process and project quality assurance process were only completed and approved in 2007 and April 2008 respectively. Ideally, these processes would have been determined in the first year of the Programme to influence all project reporting and finalisation of products.
- As identified in Chapter 8, the Programme Manager and Coordinator had important roles in ensuring efficient administration and reporting of the Programme and especially the 28 QNHTWP projects.
- The Programme coordinator position was created and appointed in mid-2006 but many of the administrative processes were required from the start of the project. This position required funding from the start of the Programme and this would have assisted the early development and use of the MER Strategy.



### 10 Integration and Adaptive Management

This chapter evaluates integration of and between Focus Areas and adaptive management to continually improve the Programme (Focus Area 7). Adaptive management is part of both general Focus Area 5 – Communication, Monitoring, Evaluation and Reporting, and Review and Focus Area 7, but it is evaluated in this chapter given the linkages with integration and continual improvement. The Chapter also briefly considers several issues relating to stakeholder engagement and consultation.

#### 10.1 Programme and project integration

Programme and project integration was important for such a large and multi-faceted initiative as the Queensland Wetlands Programme (QWP). Integration and coordination is important to:

- Provide consistent leadership and promotion of the overall Programme
- Ensure efficient and effective delivery of the Programme and projects with common processes and procedures
- Promote a cross-Focus Area approach with individual projects e.g. ensuring that, as appropriate, all projects considered communication, monitoring, evaluation and reporting, and review
- Reduce risks of inconsistent tools, guidelines and information
- Achieve effective engagement with the full range of stakeholders.

Programme and project integration has been a significant feature of the QWP but this is more apparent in some Focus Areas and for some projects than others. A departmental officer observed that projects were "integrated as best they can", especially the NHT-funded projects which had a "major focus on integration from the start". In contrast, several stakeholders considered that the GRB projects "had not had the same level of integration or focus on integration".

Key QWP projects that featured a significant level of integration included:

• Wetland mapping and inventory – the nature of the objectives of Focus Area 1 projects ensured that there was a high degree of project integration with related projects and other government and industry initiatives.



- The Wetland Information Capture project also sought to integrate existing information systems to help widen the coverage of the inventory.
- The FMS and GLM projects. A departmental officer observed that there was "good integration" between the Programme and the GLM and Farm Management Systems initiatives.

Compared with the information base projects, the interconnections between the regulatory projects and on-ground activities with other projects were not as clear. As described in section 5.2.1, the interrelated sequencing of regulatory projects appears to have caused delays to the overall development of regulation. The lack of integration between the rehabilitation guidelines (Focus Area 3) and the FMS (Focus Area 1) has resulted in the release of the rehabilitation guidelines being delayed but a better product will result in the end. Communication and capacity building could have been more integrated into all projects.

Of those respondents that answered the evaluation survey question "There was effective integration of projects within the Programme", most respondents chose to "Agree" or were "Neutral" about the statement (see Figure 10.1). Around one third of largely external respondents with more limited direct involvement with individual QWP projects were unable to respond to the statement.

There was effective integration of projects within the Programme: 40% 35% 30% 25% 20% 15% 10% 5% 0% Strongly agree Agree Neither agree Disagree Strongly Unable to or disagree disagree respond

Figure 10.1: Integration of projects within the Programme (Survey Question B25)

Sufficient time and resources need to be allocated to developing relationships and building capacities for integration. At the highest level, the JSC, Taskforce and



Working Group had key roles with promoting and ensuring appropriate levels of Programme and project integration. It is likely that more could have been achieved through greater integration between the QNHTWP and GBRCWPP projects.

The roles of both the Programme Manager and Programme Coordinator were also essential to achieve effective integration and keep the Programme moving forward between Taskforce and Working Group meetings. This included biweekly (EPA) and six weekly meetings with all project managers, inductions, training processes and regular wetland team meetings. As discussed in other chapters, both of these roles were required from the start of the Programme to provide consistent integration, information and project support.

#### Programme focus areas

The Focus Areas were initially designed to "provide an operational structure for grouping related issues" (MER Strategy 2005).

"The wetland focus areas have been established to assist in and guide project investment, although the scope of activities invested in through the Queensland Wetlands Programme will not be limited by these areas and new focus areas may be required for future implementation."

As identified in Chapter 1, alternative groupings of projects and topics have emerged through time, although the Focus Areas have provided a useful framework for the overall Programme.

A departmental officer commented that the Focus Areas "provided the missing link between the Programme goal and projects". However, a different departmental officer noted that the Focus Areas where "possibly not that relevant – especially for the JSC". The Focus Areas were only useful for grouping projects for reporting purposes.

A departmental officer also suggested that a stronger emphasis on program logic would have been useful to inform the Programme. Use of program logic would better show relationships between outputs and outcomes, enhance integration, and provide a more informed approach to Programme design, implementation, monitoring and evaluation (see Box 10.1).

It is timely to review the Programme from a program logic perspective and to also use program logic to inform subsequent investment in the Programme (or any successor).



#### Box 10.1 Program logic and NRM

Program logic is a tool that can be used to identify the expected impacts or results of NRM activities and consider how this contributes to achieving desired long term goals. Program logic can be used for informing programme planning and NRM monitoring and evaluation. A program logic approach assists with identifying and measuring short term outputs and achievement towards intermediate changes, and ultimately provides a means of demonstrating progress towards achieving longer term outcomes.

#### 10.2 Integration with other initiatives

The Programme has important linkages with a range of other Great Barrier Reef and NRM initiatives in Queensland including the Reef Plan, regional NRM planning and investment, and the National Action Plan for Salinity and Water Quality (NAP).

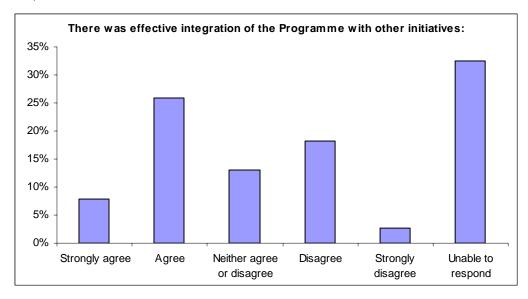
Improving integration with other initiatives was also identified and discussed by the JSC. For example, at the February 2004 meeting, the JSC noted the issues surrounding both the delivery of the wetlands package and the coastal catchments initiatives and their effective integration with Regional NRM delivery and the JSC role. The JSC agreed that further discussion of the delivery of the mechanisms to improve integration was required. Similarly, in October 2005, the JSC noted that the Australian Government was working with policy areas to improve coordination of links between the regional NRM initiatives, Reef Plan, the Wetlands Taskforce, and the Coastal Catchment Initiative.

Some projects featured strong integration with other initiatives. For example, the Pilot Programme for on-ground works sought to ensure, where possible, that the projects furthered actions under the Reef Plan and complemented the NRM plans and Regional Investment Strategies funded by the Natural Heritage Trust and the National Action Plan for Salinity and Water Quality (NAP).

Respondents to the evaluation survey had mixed views as to whether "There was effective integration of the Programme with other initiatives" (see Figure 10.2). A significant number of respondents were unable to respond to the statement. A larger number of respondents selecting "Disagree" as to the effectiveness of external integration with other initiatives compared with internal integration within the Programme.

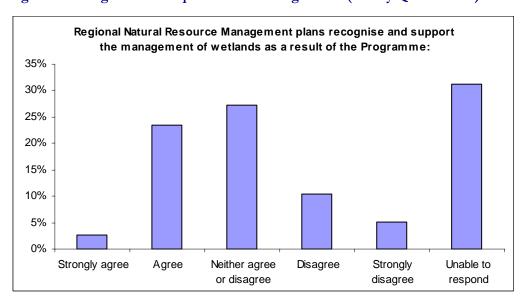


Figure 10.2: Programme integration with other initiatives (Survey Question B26)



Around one quarter of survey respondents considered that regional NRM plans recognised and supported the management of wetlands as a result of the Programme (see Figure 10.3).

Figure 10.3: Regional NRM plans and the Programme (Survey Question B9)

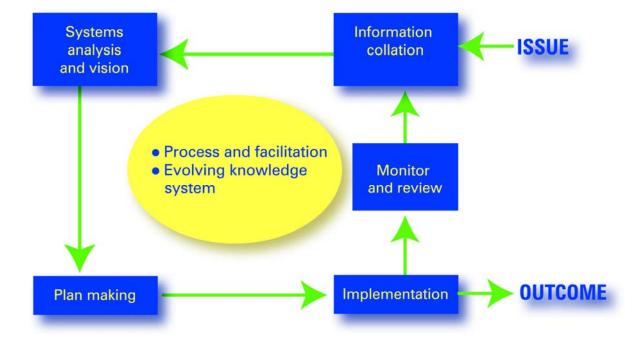




#### 10.3 Adaptive management

An adaptive management framework was developed and used as part of the *Investment Strategy for the Queensland Wetlands Programme* (2004) adopted by the Joint Taskforce (see Figure 10.4).

Figure 10.4: Investment strategy adaptive management framework



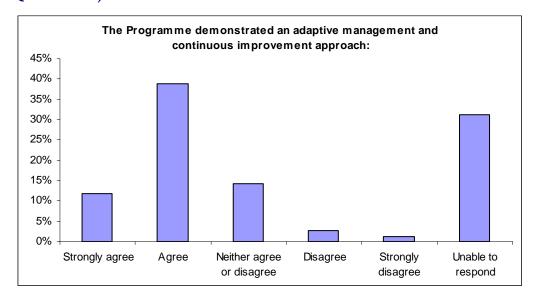
The adaptive management tramework process steps were used as investment categories to identify the types of investment required for implementation of the Programme. A "priority and rationale" for various tasks required for each investment category was also identified. A "high or very high priority" being accorded to tasks that would be essential for delivering on the objectives of the program.

Where it is well implemented, adaptive management assists the further development and implementation of complex initiatives, such as the QWP. This is especially the case where new knowledge is gained from different projects and new priorities, emerging issues and risks then need to be addressed.

The evaluation survey identified that respondents largely agreed with the proposition that "the Programme demonstrated an adaptive management and continuous improvement approach" (see Figure 10.5). This was also supported by comments and feedback from a number of structured interview participants.



Figure 10.5: Adaptive management and continuous improvement (Survey Question B27)



Many stakeholders and evaluation participants identified adaptive management as an important feature of the overall Programme and delivery of projects, and provided examples of how adaptive management was used. For example, a departmental officer noted that the staged rollout of projects provided "the ability and flexibility to adapt projects overtime". Another departmental officer identified that adaptive management provided for continuous improvement – the final project report is now a "reflections report" identifying lessons learned, what worked – what did not, and what improvements could be made for processes or outcomes. The development of "standardised contracts and on-line reporting" were also suggested as examples of adaptive management.

#### A perspective

"How was [adaptive management] understood and how is it being taken forward?"

Departmental Officer

However, some participants suggested that adaptive management was not fully understood and a more strategic approach could have been undertaken. For example, a departmental officer suggested that: "although adaptive management was a principle of the Programme, it is still in its infancy, and how was it understood and how was it being taken forward".

A priority is to review current knowledge and application of adaptive management, and consider how adaptive management can be further applied to best practice wetland management. This could also involve a more in-depth and strategic review of how adaptive management has been used, and how the Programme (or any successor) could best use adaptive management in the future.



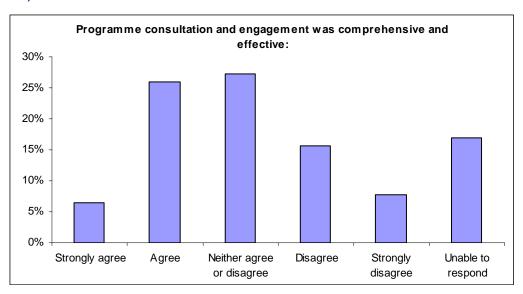
#### 10.4 Stakeholder engagement and consultation

Best practice stakeholder engagement starts with a clear consultation objective and identification of the range of interested people, agencies and organisations interest. It is important that stakeholders understand why they are being consulted and that there is mutual understanding and realistic expectations about the engagement. The nature and means of consulting with stakeholders will, in part, reflect their involvement. Stakeholders may not have been consulted for a number of reasons, including the sensitivity of the initiative or insufficient time. As with many aspects of Programme and project planning, stakeholder engagement should happen as early as possible.

As identified in Chapter 4, the EPA conducted extensive consultation with groups requiring wetlands mapping and access to wetlands information. This included regional NRM bodies, peak industry groups, local governments, non-government organisations, the Australian Government and other Queensland Government departments.

Survey respondents were mainly positive in choosing to "Agree" or were neutral with the statement that "Programme consultation and engagement was comprehensive and effective". However, around one quarter chose to "Disagree" and "Strongly disagree" (see Figure 10.6).

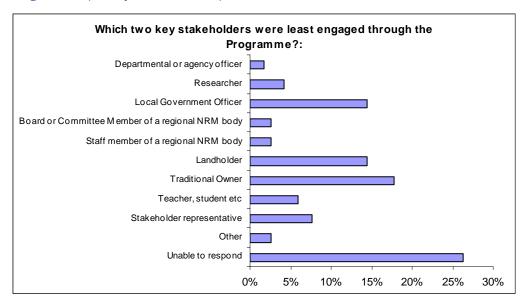
Figure 10.6: Programme consultation and engagement (Survey Question B18)





Survey respondents primarily identified local government officers, landholders and Traditional Owners as being "least engaged through the Programme?" (see Figure 10.7).

Figure 10.7 Key stakeholders that were least engaged through the Programme (Survey Question B20)



A QWP stakeholder engagement framework identifying key stakeholders, interests and likely engagement timelines would have been valuable. All projects could have then factored in effective engagement into their design and implementation. This would have assisted with broader Programme engagement, and promoted a more integrated and consistent approach to stakeholder engagement.

### 10.5 Assessment against Focus Area outputs

The Terms of Reference for the evaluation outlined three outputs or key performance measures to assess integration and adaptive management.

### What is the level of integration within the programme?

Programme and project integration has been a feature of the overall Programme but is more apparent in some Focus Areas, such as Focus Area 1, and for some projects than others. Lack of integration with some projects, for example, the rehabilitation guidelines, has caused delays as changes have had to be made to final reports to ensure accurate and consistent information. Communication and capacity building could also have been further integrated into all projects.



# What were the underlying assumptions applied to the programme in terms of focus areas and projects and how might these need to change for any future implementation?

The Focus Areas have been valuable for framing and communicating the different dimensions of the Programme, for example, specific areas, such as the wetlands information base and cross-cutting or general focus areas, such as communication, monitoring, evaluation and reporting, and review. Some of the Focus Area outputs and performance measures overlap and a program logic review would assist in setting more appropriate performance measures and targets.

### Are there examples of adaptive management and continual improvement?

There are many examples of adaptive management being built into the Programme Investment Strategy (2004) and into individual projects and processes. The Programme has also demonstrated a continual improvement approach with "reflection reviews" and project evaluations to inform subsequent projects and activities.

### 10.6 Summary

- Programme and project integration was important for such a large and multifaceted initiative as the QWP. Integration and coordination is important to:
  - o provide consistent leadership and promotion of the overall Programme
  - o ensure efficient and effective delivery of the Programme and projects with common processes and procedures
  - o promote a cross-Focus Area approach with individual projects e.g. ensuring that, as appropriate, all projects considered communication, monitoring, evaluation and reporting, and review
  - o reduce risks of inconsistent tools, guidelines and information
  - o achieve effective engagement with the full range of stakeholders.
- Programme and project integration has been a significant feature of the QWP but is more apparent in some Focus Areas and for some projects than others, especially within Focus Area 1.
- The roles of both the Programme Manager and Programme Coordinator were essential to achieve effective integration. Both of these roles were required



from the start of the Programme to provide consistent integration, coordination and project support.

- The Focus Areas were initially designed to "provide an operational structure for grouping related issues". Alternative groupings of projects and topics have emerged through time, although the Focus Areas have provided a useful framework for the overall Programme.
- Program logic is a tool that can be used to identify the expected impacts or results of NRM activities and consider how this contributes to achieving desired long term goals. It is timely to review the Programme from a program logic perspective and to also use program logic to inform subsequent investment in the Programme (or any successor).
- The Programme has important linkages with a range of other Great Barrier Reef and NRM initiatives in Queensland including the Reef Plan, regional NRM planning and investment, and the National Action Plan for Salinity and Water Quality (NAP).
- Some projects featured strong integration with other initiatives. For example, the Pilot Programme for on-ground works sought to ensure, where possible, that the projects furthered actions under the Reef Plan and complemented the NRM plans and Regional Investment Strategies.
- Adaptive management is an important feature of the overall Programme. For example, an adaptive management framework was developed and used as part of the *Investment Strategy for the Queensland Wetlands Programme* (2004) adopted by the Joint Taskforce.
- Many stakeholders and evaluation participants identified adaptive management
  as an important feature of the overall Programme and delivery of projects, and
  provided examples of how adaptive management was used. However, some
  participants suggested that adaptive management was not fully understood and
  a more strategic approach could have been undertaken.
- A priority is to review current knowledge and application of adaptive management, and consider how adaptive management can be further applied to best practice wetland management to further influence the Programme (or any successor) in the future.



- Some QWP projects involved extensive consultation, for example, with groups requiring wetlands mapping and access to wetlands information. However, other projects, especially relating to the regulatory framework, were conducted in-house.
- A QWP stakeholder engagement framework identifying key stakeholders, interests and likely engagement timelines and methods would have been valuable. All projects could have then factored in effective engagement into their design and implementation. This would have assisted with broader Programme engagement, and promoted a more integrated and consistent approach to stakeholder engagement.



# 11 Key Gaps, Constraints, Risks and Opportunities

This Chapter evaluates the effectiveness of the Queensland Wetlands Programme (QWP) in relation to key constraints, gaps, risks and opportunities. While much has been achieved through the Programme, there remain some important gaps in knowledge and responses. There are also a series of risks if the Programme does not continue in some form. Various opportunities and potential responses to inform future wetland management are discussed at the end of the chapter, and also in Chapter 12 – Key learnings and key factors for future wetlands collaboration.

### 11.1 Key constraints affecting the Programme

The effectiveness of the Programme has been influenced by several key constraints. Broadly, a constraint may be a limitation or restriction on the success of the Programme and/or individual projects.

As discussed in Chapter 9, Programme governance, approval and reporting processes were a key constraint on the timely approval, commissioning and delivery of most QWP projects. The different reporting arrangements were also seen as affecting communication and Programme integration. For example, a survey respondent identified that:

Elements of the governance were constraints. Due to the many levels, it took time for projects to gain approval or begin. I believe the Taskforce was an unnecessary layer, as the QWJGT Working Group was adequate. There was unequal reporting requirements for the State and Commonwealth Government. Projects funded through the joint NHT funding programme were scrutinised to ensure they aligned with QWP objectives, were delivering required outputs and the project management was sound. Projects funded through the GBRCWPP were not seen by any other group other than the Commonwealth. This led to an imbalance in the communications and branding of the projects and confusion about GBR outcomes. Project integration is made more difficult if outputs of elements of the programme are unclear.

A departmental officer also observed that the double layer of administration with the Taskforce and JSC, along with the need for variation of most projects to extend timeframes, was a key constraint. There was constant pressure to meet NHT timelines but two different groups to satisfy, and this created an administrative burden. This also resulted in a risk that it could have given "the



Programme a poor reputation with questions about the confidence in the projects and results".

As identified in Chapter 6, the timeframe and timing of the on-ground projects was also seen as a major constraint. For example, one survey respondent identified:

"The biggest constraint was the time given to the on-ground projects. The project time frame of 12 months was not long enough to deliver the Programme's high value long-term conservation objectives. A 12 month time frame imposes the following limitations on the delivery of sound long-term wetland management outcomes:

- limits the scope of projects that can be undertaken (only activities that are quickly implemented and require minimal consultation can be completed reduces the value of monitoring (monitoring needs to be conducted over several season, not just within 12 months)
- doesn't allow for responsive management (wetland management regimes, e.g. fire, require fine tuning in response to seasonal variations and outcomes will not be seen within 12 months) doesn't allow for follow-up activities (activities such as weed control require follow-up over a number of years to consolidate and maintain project objectives)."

A departmental officer observed during a structured interview that a major constraint was the large number of groups and stakeholders to communicate with, and lack of agreement or understanding of "what constitutes a wetland".

A summary of key constraints identified through the evaluation survey is outlined in Table 11.1. Almost one third of survey respondents identified one or more constraints. A majority of these respondents identified the short term nature of some QWP projects, the lack of time to plan, obtain approvals and complete onground works (typically 12 months or less), and high project staff turnover.

Table 11.1 Summary of key constraints affecting the Programme (Question 29B)

### **Key Constraints**

The short term nature of some QWP projects, the lack of time to plan, obtain approvals and complete onground works (typically 12 months or less), and high project staff turnover. [12 respondents]

"Pressure to spend money in a particular time was sometimes unrealistic"

The Programme was not communicated widely enough to a broad range of stakeholders [4 respondents]

"The Programme wasn't widely communicated to a broader group of stakeholders"

QWP projects took a long time to be completed and final products are not yet available [3 respondents]

"Products took too long to be delivered. Where are the typologies, final draft of wetland rehabilitation guidelines etc?"



### 11.2 Key gaps in the Programme

Various gaps in the Programme were identified through the stakeholder interviews, survey and analysis. Generally, these were longer term concerns, such as condition monitoring, and continuing to understand wetland systems and functions. However, insufficient engagement and extension across the entire Programme were also seen as key gaps.

A departmental officer observed that "long-term monitoring and reporting on wetland health" was a key gap, but that this monitoring could not be addressed before the Programme mapping and inventory was completed. Long term monitoring was a priority for the future, and could be linked into existing state of the environment reporting and other similar initiatives.

Along similar lines, an industry representative suggested that there were still gaps in:

- Understanding what wetlands are, and what aspects of wetland management are critical, i.e. what are the priorities.
- Still a great need for wetland extent and condition monitoring and reporting.
- Understanding the modified landscape need to be careful in understanding why we are managing wetlands.

### One survey respondent identified that:

"Further work is now required to build on the success of the QWP to prioritise wetlands through tools such as AquaBAMM. This will allow for targeted actions including environmental flow allocations (water sharing), data inventory collection, protection and rehabilitation of ecologically significant aquatic ecosystems. There is also the need to research the more complex issues such as connectivity at the landscape scale between and within inland freshwater wetlands. Connectivity is such an important, but little understood, ecological process that sustains wetlands values. Another significant issue yet to be fully addressed is water flow interactions with groundwater dependent ecosystems, particularly for Great Artesian Basin wetlands."

Several stakeholders observed during interviews that particular gaps involved:

- Extension and communication from "not having this built into projects from day one".
- Getting products built into, and used in, day-to-day wetland management.
- Lack of contact and engagement with local government.



- Lack of scientific knowledge and materials around wetland management.
- Lack of contact with Traditional Owners and limited involvement in projects and wetland management initiatives.

Not all survey respondents considered there were gaps. One respondent to the online survey suggested:

"There are minimal gaps but if a second phase of the programme is not implemented many of the tools will not be used with associated lack of wetlands outcomes."

A summary of key gaps identified through the evaluation survey is outlined in Table 11.2. Around one quarter of survey respondents identified one or more key gaps. A majority of these respondents identified either the lack of engagement with landholders and agricultural producers, or the lack of on-ground works outside of the GBR catchment (see Table 11.2).

### Table 11.2 Summary of key gaps affecting the Programme (Survey Question 29B)

### **Key Gaps**

Lack of engagement with agricultural producers and lack of training on wetland ecology [5 respondents]

"Lack of input from rural communities regarding wetland management and awareness"

Lack of support on-ground works in all Queensland regions [5 respondents]

"It promised a lot but has achieved nothing on ground in my region"

Lack of use of management tools (also a risk) [4 respondents]

"A gap maybe in the use and processing of wetland tools at the application and implementation level"

Stakeholders and communities were not aware of the Programme and its goals [3 respondents]

"Not having all stakeholders aware of the programme and gaps in communities knowledge of programme and its goals"

Lack of progress with the regulatory framework to protect wetlands [2 respondents]

"The lack of progress with the legislative regime for wetlands is a gap."

Lack of knowledge of basic wetland functioning and techniques for major rehabilitation projects [2 respondents]

"Still lots of research gaps relating to basic wetland functions which makes it difficult to form public policy"

A comprehensive monitoring program on condition and trend of Queensland wetlands [2 respondents]

"There is a need for a comprehensive monitoring program on the condition and trend of Queensland wetlands"



### 11.3 Key risks with the Programme

A range of risks affecting the Programme, and potentially being caused by the Programme, were identified through the structured interviews and survey.

The lack of progress with the wetland regulatory framework was identified by many stakeholders and respondents as either a constraint or risk. For example, a departmental officer observed that:

"The biggest risk was not getting the green light for the regulatory framework. It depended on political will and approval from EPA management."

Further, engaging external stakeholders about any regulatory framework would be key and the regulatory framework needed "to be balanced with additional support through funding and incentives" – otherwise the broader Programme goals would not be achieved. An industry peak body representative highlighted that a major risk for industry was "poorly planned legislation".

Overall, the primary risk identified by respondents was the lack of ongoing funding to maintain and update the mapping, tools and other wetland management information. For example, one respondent identified that the:

"Potential lack of future funding could adversely affect the QWP's ability to maintain and upgrade important base tools like the mapping and AquaBAMM work".

Another identified risk was the number of projects being undertaken and that only the QWP team had a full understanding:

"Many projects [are] running concurrently with only really the QWP team understanding the full array and possible synergies."

A related risk observed by a departmental officer was "information not reaching the target audience".

Other key risks identified by survey respondents that could affect the Programme are identified in Table 11.3.



### Table 11.1: Summary of key risks affecting the Programme (Question 29B)

### **Key Risks**

Lack of ongoing funding to maintain and update the mapping, database, tools, website and other information [7 respondents]

"Risk of specific wetland management ceasing without well planned follow-up programmes."

Loss of interest and the Programme receives a lower priority by future Governments [2 respondents]

"Sustaining gains – continuation of Programme investment over the longer term"

Stakeholders will not use facilities to store and access wetland data [2 respondents]

"risks are that no-one will successfully use the facilities to store and access wetland data"

Ability of Programme to influence changed planning and management decisions [2 respondents]

"Need to move new knowledge into decision-making processes (how will the programme influence changed planning and management decisions)"

### 11.4 Opportunities within the Programme

In response to the identified constraints, gaps and risks identified in sections 11.1 to 11.3, the following opportunities have been identified within the Programme. Some of these opportunities may be able to be implemented even if the Programme does not continue in its current form. However, as discussed in Chapter 12, much would be lost if the Programme does not continue in some form.

An important opportunity is to more widely promote the range of wetlands mapping, tools and guidelines that have been produced through the Programme. This will be essential to further build on initial education, capacity building and communications initiatives.

There are opportunities to provide training and support to a range of regional agency staff, planners, NRM officers, land and water managers, and other stakeholders involved with development assessment and day-to-day management of wetlands. Targeted capacity building and communication products could be provided in partnership with peak bodies and professional groups to achieve broader coverage and support for wetland management.

A further opportunity exists with working with landholders to integrate wetland management into existing land management practices, and promoting the use of the range of guidelines and other tools.



### 11.5 Summary

- The effectiveness of the Programme has been influenced by several key constraints. Programme governance, approval and reporting processes were most often identified as a key constraint on the timely approval, commissioning and delivery of most QWP projects. The different reporting arrangements were also seen as affecting communication and Programme integration.
- A second major constraint was the 12 month timeframe to implement the onground projects. This limited the scope of projects, constrained engagement and affected the quality of conservation outcomes.
- Long-term monitoring and reporting on wetland condition is a key gap, but
  this monitoring could not be addressed before the Programme mapping and
  inventory. Long term monitoring is a priority for the future, and could be
  linked into existing state of the environment reporting and other similar
  initiatives.
- Lack of engagement with various stakeholders including landholders, local government and Traditional Owners was commonly identified. There was also a gap in extension and communication and the need to get new wetland management mapping and tools used by stakeholders.
- The key risk with the Programme was the lack of progress with the wetland regulatory framework. A regulatory framework also needed to be matched with management tools, funding and incentives" – otherwise the broader Programme goals would not be achieved. A major risk for industry is poorly planned and implemented wetlands legislation.
- Overall, the primary risk identified by respondents to the evaluation survey
  was the lack of ongoing funding to maintain and update the mapping, tools
  and other wetland management information.



### 12 Key Learnings and Key Factors for Future Wetlands Collaboration

This Chapter briefly considers a range of key learnings from the Queensland Wetlands Programme (QWP) and key factors for future wetlands collaboration.

### 12.1 Key learnings

There are many key learnings from this evaluation as identified in earlier chapters. This section briefly identifies some of the most important using the Focus Area headings.

### Wetland Information Base

A range of wetland information is needed to underpin effective management, conservation and protection of wetlands. A priority for the QWP was to commission a number of wetland mapping and inventory projects that formed the "cornerstone" of the Programme and supported other projects.

A range of media are required to communicate wetland information to different stakeholders. The innovative use of on-line mapping and conceptual models will greatly assist the dissemination and use of the wetland mapping.

### **Wetland Planning Arrangements**

The development of new regulatory regimes can be impacted by many political, institutional and socio-economic variables. At all levels of government, strong leadership, sound regulatory impact assessment and effective stakeholder engagement is required to support the timely development of regulation.

Any regulatory regime requires the support of other instruments including financial incentives, best practice management guidelines and other information.

### **On-ground Activities**

On ground activities require several years for planning, with sustained funding and targeting of priority areas. Effective landholder and community engagement is essential and future maintenance is built into projects.

All on-ground projects need to be reported on and contain a monitoring program that assesses the site at the beginning and end, and possibly at other times during a project. Making sure that the key findings, successes and failures are available for others to learn and implement.



### **Education and Capacity Building**

Sufficient time for education and capacity building needs to be built into a programme. One approach would be to take four years to implement key projects followed by another two years using the results of the projects with capacity building and extension.

### Communication, Monitoring, Evaluation and Reporting and Review

A key learning is the importance of early, open and regular communication with stakeholders from the start of a programme. Management of expectations is also important in terms of informing stakeholders of what the programme and projects are going to do, and what they are not going to do.

Effective monitoring, evaluation and reporting of all projects, and a comprehensive Programme annual report, is also critical. The MER Strategy (2005) was a sound initiative but more could have been achieved, for example, with inclusion of measureable performance targets.

### Governance and contractual arrangements

The initiative has widespread support from different Government departments and has high level endorsement.

Governance processes are defined early in the programme and there are clear roles and accountabilities.

Contractual arrangements are efficient and provide for appropriate levels of accountability and probity, but are also capable of being flexible where minor amendments or changes need to be made.

### Integration

Programme and project integration is assisted by a well-functioning working group, and effective programme management and coordination. Key management and coordination staff are required to maintain continuity and consistency for programmes that are large and complex.

### 12.2 Key factors for future collaboration in wetlands management

This evaluation has identified a range of key factors for future collaboration in wetlands management. This section considers a number of essential governance and administrative processes required for effective collaboration in wetlands management. It also considers project selection and prioritisation, and integration and coordination.



### Governance and administrative processes

It is essential that a range of key governance and administrative processes are developed and agreed at the start of any large and multi-year wetlands programme. These processes include:

- assigning roles and responsibilities of governance bodies e.g. Terms of Reference
- determining and reporting on in-kind contributions
- developing a stakeholder engagement strategy and related processes
- project risk assessment and mitigation
- determining quality assurance processes for all draft and final products
- preparing a monitoring, evaluation and reporting strategy, and
- preparing a communications strategy.

Important guides and templates include:

- Standardised project briefs and contract documents but with some discretion to alter standardised contracts depending on the project scope and risk.
- Standard project proposal, reporting and evaluation templates.

Sufficient training and oversight is required of all project managers and project teams on the above administrative processes and protocols.

On-line administration and reporting assists project management and delivery.

### Project selection and prioritisation

Project selection and prioritisation is assisted by clear programme goals and objectives, and sufficient understanding of the most significant problems.

Importantly, program logic and adaptive management can inform planning, project selection, integration and implementation of wetlands programmes.

Measureable objectives and targets assist progress assessment and evaluation of results.



Projects should be periodically reviewed through a project stocktake and/or gap analysis. These reviews can be conducted at predetermined intervals and/or after the completion of major project milestones.

### Integration and coordination

A governing body, such as a Taskforce, and a programme manager and coordinator are also critical in ensuring effective strategic oversight, and day-to-day direction and support for project managers. Programme leadership and direction is vital.

Overall programme and project integration and coordination can be supported by regular project meetings, internal programme communications, and use of on-line systems to promote integrated project approaches.

#### 12.3 Other matters

In Queensland, the EPA was established as the lead agency for wetlands in 1993 and is responsible for implementing the Wetland Strategy, which was endorsed by Cabinet in 1999. In February 2004, the Queensland EPA released the Wetlands Conservation and Management Implementation Plan. The purpose of the Implementation Plan was:

"To integrate various wetlands related programs and projects into a single strategic framework which will guide the Agency's involvement in and approach to wetlands conservation and management, including restoration and achieve the Agency's target for wetlands protection. To fulfil the requirement of the "Strategy for the Conservation and Management of Queensland Wetlands, 1999 (Wetland Strategy)" which requires the EPA to develop a prioritised Implementation Plan".

Many issues and actions identified within the Wetland Strategy (1999) and Implementation Plan (2004) have been addressed through the QWP. It is appropriate and timely to undertake a ten year review of the Wetland Strategy, and identify the next set of actions for a new implementation plan. This should occur as a priority given the ever changing policy and programme funding landscape, especially with the introduction of the Australian Government's Caring for our Country (the replacement for the Natural Heritage Trust).



### 13 Conclusions and Recommendations

This Chapter identifies key findings and recommendations in relation to the primary objective, and the specific objectives for the evaluation as outlined in Chapter 1. The primary objective of this end-of-programme evaluation was:

"to evaluate the effectiveness of the QWP including project success in meeting their objectives and overall QWP goal and objectives as well as the arrangements and processes used to implement the Programme. In doing this, the evaluation should reflect on lessons learnt, identify improvements and provide recommendations on the way forward for collaborative wetland management."

Overall, the Queensland Wetlands Programme (QWP) has been largely effective and it has supported and enabled a range of quality projects and programs to enhance the sustainable use, management, conservation and protection of Queensland wetlands. Other Australian jurisdictions lack such a comprehensive Programme with similar levels of mapping, inventory, information and guidance to support effective wetlands management.

The scope of the QWP was large and ambitious and while a number of projects are being completed, there have been significant achievements to date. Starting from a "low information base", individual QWP projects and results have significantly improved or appear likely to improve the wetlands information base and education and capacity building, especially in the longer term. Many of the methodologies and processes developed through the Programme had not previously been developed in Australia.

Key Programme and project achievements include:

- wetland mapping and capture of scientific and general wetland data
- a series of on-ground works with significant stakeholder engagement across the Great Barrier Reef catchment
- development of soil indicators and other wetland indicators and profiles
- development of a range of assessment tools, management guides, management systems and other information

<sup>&</sup>lt;sup>11</sup> Queensland Department of Natural Resources and Water invites offers for Queensland Wetlands Programme Evaluation, Offer Number NRO0117, p. 9.



• development of a "first-stop-shop" for accessing such information through Wetland *Info*.

1: It is recommended that critical information systems, such as the wetland mapping and inventory, are actively funded and maintained on an on-going basis to ensure that the information is accurate and supports any regulatory regime and general wetlands planning and management.

A range of on-ground activities have been undertaken through the Great Barrier Reef Coastal Wetlands Protection Plan to protect and rehabilitate significant coastal wetlands. These projects have been short-term and more localised, but have successfully engaged NRM bodies and local communities. Future management and monitoring of outcomes from these projects, including water quality and changes to wetland values, remains uncertain.

2: It is recommended that an additional targeted on-ground works programme is explored but that more time is provided for individual projects and that long term maintenance and monitoring is factored into these projects.

The significant challenge for the Programme to date has been slow progress with development of a wetland regulatory regime under Focus Area 2. A series of projects on wetland planning arrangements was undertaken through the Programme to support the development of a regulatory regime to conserve and protect Queensland wetlands. However, the regulatory regime has yet to be established and uncertainty over changes in the regulatory regime is preventing some projects from being completed. However, the October 2008 announcement by the Queensland Premier to proceed with development of a regulatory regime for the Great Barrier Reef provides the necessary authority and direction to complete this set of projects.

3: It is recommended that priority is given to completing the regulatory regime projects with appropriate regulatory assessment and stakeholder engagement. It will be important that any regulatory regime is supported by a range of incentives, management tools and information to ensure appropriate incentives for wetlands management.

With time, attention will also need to be given to protecting and conserving wetlands outside of the GBR with development of an appropriate regulatory regime supported by other instruments.

Evaluate the effectiveness of the Programme's projects in meeting their stated objectives and overall contribution to the Programme's stated goal.



Given that some of the QWP projects are still being completed, it is difficult to fully assess if all QWP projects will meet their stated objectives. However, assuming that current projects continue and meet scheduled milestones for delivery, then it is likely that the majority of QWP projects will meet their stated objectives and contribute to the Programme's long term goal as outlined above. Long term monitoring of wetland extent and condition will be supported by various QWP projects and this is a priority for the future.

4: It is recommended that a framework is funded and developed to enable long term monitoring and reporting on wetland extent and condition covering the full range of wetland values.

Evaluate the effectiveness of the arrangements and processes used by the Programme including consultation, engagement and communication processes, legacy issues and implementation strategies.

Consultation and stakeholder engagement have been strong elements of some of the QWP projects. Effective and ongoing engagement with key stakeholders will be vital with the continued roll-out of various project products and information. As identified above, appropriate stakeholder engagement will be vitally important with the development of any regulatory regime.

While a strategic approach to Programme communications was not established until two years into the Programme, a range of communications approaches have subsequently been used to successfully promote the Programme and project results. Following recent 2008 Programme workshops with key stakeholders, it will be important to maintain momentum and increase Programme and project communications with a range of stakeholders, especially local government, land managers, peak bodies, and Traditional Owners.

5: It is recommended that further communication on QWP products and outcomes is provided to the full range of Programme stakeholders, especially local government, land managers, peak bodies and Traditional Owners.

Programme governance and project administration and management of such a complex and inter-related Programme is challenging. While individual projects have produced quality results, many projects have been affected by delays and required extensions. More focused Programme and project administration and management, with a strong risk management approach, may have benefited the efficient completion of individual projects.

6: It is recommended that for any future Wetlands Programme, all project governance, administration, risk mitigation, quality assurance, and monitoring, evaluation and reporting



processes are agreed at the start of such a Programme, and that these agreed processes are applied to all projects within such a Programme.

### Document the contributions and relevance of the Programme to improve the knowledge base and capacity of resource managers in relation to wetland management in Queensland.

The Programme has vastly improved the knowledge base and has started to extend the capacity of wetland managers in Queensland. As identified above, a priority for the future is to continue with capacity building and extension, and promote the availability of many products (e.g. wetland maps) will be critical to inform regional NRM plan and RIS reviews.

7: It is recommended that in the future the Programme focus on capacity building and extension to ensure that the range of products and information is fully communicated to key stakeholders responsible for wetland management and/or responsible for planning or managing activities that may affect wetlands.

## Document the key learnings and the key factors for success for future collaboration in wetland management.

Overall, the Programme has provided a solid foundation for Queensland wetlands conservation and management for the near future. However, the ultimate success of the Programme will be assessed on longer term improvement in wetland condition and trend, and increased stakeholder understanding of the full range of wetlands values.

It will be important that Programme momentum is maintained into the future to fully capitalise on the initial five year investment. Many of the projects and associated tools and information are only now being finalised and will require further promotion, support and ongoing review.

8: It is recommended that further investment is made to support the Queensland Wetlands Programme with the primary focus being on maintenance and updating of critical information (e.g. mapping and inventory), capacity building, extension, and communication of the new wetland information and tools developed through the first five years.

Many issues and actions identified within the Queensland Wetland Strategy (1999) and Implementation Plan (2004) have been addressed through the QWP. It is appropriate and timely to undertake a ten year review of the Wetland Strategy, and identify the next set of actions for a new implementation plan. This should occur as a priority given the ever changing policy and programme funding landscape,



especially with the introduction of the Australian Government's Caring for our Country (the replacement for the Natural Heritage Trust).

9. It is recommended that the Queensland Strategy for the Conservation and Management of Queensland's Wetlands (1999) is reviewed and that a new implementation plan is developed. This should occur as a priority given the results of the Queensland Wetlands Programme, and the ever changing policy and programme funding landscape, especially with the introduction of the Australian Government's Caring for our Country.

Finally, it would be beneficial to further draw on program logic to plan and inform any future investment in the QWP.

10: It is recommended that the Queensland Wetlands Programme is reviewed in accordance with program logic, and that program logic is also used to inform subsequent investment in the Programme (or any successor).



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### **Appendix A: Terms of Reference**

Sourced from the Queensland Department of Natural Resources and Water Terms of Reference, dated 6/6/08.

### 1. BACKGROUND

The Queensland Wetlands Programme (QWP) is a joint initiative of the Australian and Queensland Governments that aims to support projects and programmes which will result in long-term benefits to the sustainable use, management, conservation and protection of Queensland wetlands.

The Programme is funded through two sub-programmes:

• Natural Heritage Trust Extension Wetlands Programme

This programme aims to develop and implement measures to support Queensland in the conservation and management of wetlands as outlined in the Bilateral Agreement (2004). To this end the Commonwealth Government has allocated \$7.5M which is matched by \$7.5M in-kind funding by the Queensland Government to implement the relevant provisions of the Natural Heritage Trust Bilateral Agreement. The Programme targets wetlands across Queensland including those in the Great Barrier Reef catchment.

• Great Barrier Reef Coastal Wetlands Protection Programme (GBRCWPP)

This programme aims to develop and implement measures for the long term conservation and management of wetlands in the Great Barrier Reef catchment as per the strategies contained in the Reef Plan. The Australian Government has allocated \$8 million to this programme to assist in achieving the goal of the Reef Water Quality Protection Plan (Reef Plan).

The QWP is being implemented over a five year period (2003/04 to 2007/08). The Australian Government Department of the Environment, Water, Heritage and the Arts (formerly the Department of the Environment and Water Resources) and the Queensland Government's Environmental Protection Agency (EPA) are lead agencies for its implementation.

The QWP is structured to accommodate three levels of operations, namely:

- Programme level provides high level direction through a goal and objectives.
- Focus areas provide an operational structure for grouping related issues.



• Projects – the building blocks that generate new information and tools to support decision making.

QWP focus areas have been established to guide project investment. Wetland focus areas include:

- Improving the wetland information base
- Wetlands planning arrangements
- On-ground activities to protect and rehabilitate wetlands
- Education and capacity building.
- Communication, Monitoring, evaluation and reporting, and Review Outputs

Additional focus areas 6 & 7 have been added for the purpose of this evaluation.

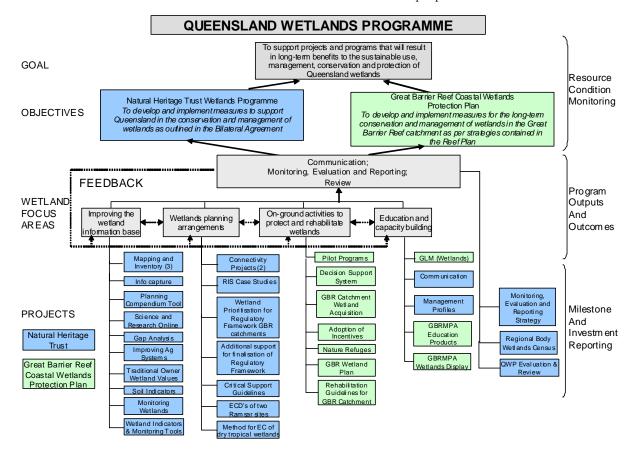


Figure 1. The goal, objectives and focus areas of the Queensland Wetlands Programme and their relationship to the QWP MER.



#### 2.SCOPE

The Department of Natural Resources and Water (NRW) is seeking offers from interested parties to enter into an Agreement to undertake an evaluation of the Queensland Wetlands Programme. This is a joint initiative of the Australian and Queensland Governments that aims to support projects and programmes which will result in long-term benefits to the sustainable use, management, conservation and protection of Queensland wetlands.

This evaluation will be based on the QWP Monitoring, Evaluation and Reporting Strategy (MER Strategy) and other key criteria. Development of the QWP MER Strategy provided a consistent and transparent approach to reporting on the performance and progress of implementation of the QWP and its individual projects. It needs to be recognised however, that this strategy was developed at the beginning of the five year Programme and that there have been some changes to outputs and outcomes since that time.

All projects funded under the Programme i.e. both Natural Heritage Trust Wetlands Programme and Great Barrier Reef Coastal Wetlands Protection Programme projects will be included in the evaluation as per the QWP MER Strategy.

The project will be managed by NRW to be consistent with the evaluations of other NHT Programmes.

This evaluation will be conducted by an independent entity in order to accurately gauge the effectiveness and efficiency of the QWP. The Programme evaluation will utilise the identified focus areas from QWP MER Strategy and general focus areas 6 and 7 detailed below. The QWP MER Strategy proposed the use of the wetland focus areas as a guide for delivery of project outputs in support of the goals and objectives of the Programme (refer Figure 1). Five focus areas were identified and outputs defined.

### Wetland Focus Area 1 - Improving the wetland information base

Output: Consistent methodologies and comprehensive assessment and identification of wetlands, their ongoing monitoring and data storage.

- How has this project improved the wetland information base?
- How are stakeholders (community, government, industry) more informed about wetlands?



- How has the project contributed to extending the knowledge base on wetlands?
- How has the information gained in these projects assisted in expanding the scope of projects under other focus areas?
- How has the information been made more accessible to decision makers?
- How has it been stored so that it is more conducive to be complimentary to other State and National NRM datasets?

### Wetland Focus Area 2 - Wetland planning arrangements

Output: Natural resource planning and cohesive planning arrangements to protect, conserve and manage wetlands

- What changes in planning arrangements have occurred to improve wetland condition and extent?
- What are the approaches to developing and implementing NRM plans that recognise and support wetland conditions?

### Wetland Focus Area 3 – On-ground activities to protect and rehabilitate wetlands

Output: On-ground activities to protect and rehabilitate wetlands including incentives, on-ground management activities, protection and rehabilitation. The activities will support Reef Plan catchments and non-reef catchments.

- What improvements have occurred in the condition and extent of wetlands in reef and non-reef catchments?
- What improvements have occurred in the water quality entering the Great Barrier Reef?

### Wetland Focus Area 4 - Education and capacity building

Output: To raise stakeholder awareness of the programme, how it can assist them and to provide education and capacity building for landholders in the better management of wetlands

- How has awareness of wetlands issues improved?
- How has the ability to identify problems and provide resolutions improved?



• How has the capacity for land managers to implement and maintain wetland restoration and conservation measures increased/improved?

## General Focus Area 5 – Communication, Monitoring, evaluation and reporting, and Review

Outputs: 1. To ensure that products and outcomes of the Programme are disseminated widely and feedback processes used to report on the Programme. 2. The MER Strategy for the Queensland Wetlands Programme will develop a consistent and transparent approach to reporting on the progress of implementation, and the effectiveness of the actions invested in for both the Natural Heritage Trust Wetlands Programme and Great Barrier Reef Coastal Wetlands Protection Programme. 3. To review and refine the Queensland Wetlands Programme through an adaptive management framework.

- How has the feedback process refined the Programme?
- How has the MER provided a transparent and consistent approach for reporting on the Programme implementation?

### General Focus Area 6 – Governance and contractual arrangements

- What is the process of contract design and approval? Is this appropriate?
- Has the governance arrangements structure been appropriate?
- Have reporting processes been appropriate to provide information on the progress and achievements of projects to investors?

## General Focus Area 7 – Integration of and between focus areas and adaptive management to continually improve the Programme

- What is the level of integration within the programme?
- What were the underlying assumptions applied to the programme in terms of focus areas and projects and how might these need to change for any future implementation?
- Are there examples of adaptive management and continual improvement?

This project will focus on the evaluation of Programme performance and not on wetland resource condition and trend. The project will utilise and build upon the key performance measures identified within the QWP MER strategy.



A cross agency project steering committee has been established to ensure the scope of the project is clearly defined and to guide the project team in the delivery of tasks and outputs. The Steering Committee will meet regularly with the project team throughout the project.

The general approach will include assessment of key strategic documents and reporting processes. The project will also utilise semi-quantitative and qualitative assessment tools including surveys, structured interviews and focus groups with key deliverers and implementers. The findings will be presented in a final report and communicated to stakeholders as deemed appropriate.

Only one offerer will be appointed to undertake this consultancy.

The successful offerer will provide two (2) hard colour copies and one (1) electronic copy of the Interim draft report, six (6) colour copies and one (1) electronic copy of the draft report and six (6) bound colour copies and one (1) electronic copy of the final Evaluation Report. An electronic catalogue of all documentation developed and acquired during the contract is required to be submitted with the final Evaluation Report.

The successful offerer will also be required to present the findings of the draft report to the project steering committee and give a formal presentation of the final report with recommendations to the Wetlands Taskforce or similar forum.

### 3. REQUIREMENTS

Using the focus areas listed above, conduct the following:

### **Process**

a. Review, evaluate and document the effectiveness of the QWP projects in meeting their stated objectives and overall contribution to the QWP stated goal and objectives using the QWP MER strategy as a guideline. This will include evaluation of the integration aspects of the Programme including integration with Industry, LG, landholders, and other stakeholders.

b. Evaluate the effectiveness of the arrangements and processes used by the QWP including consultation, engagement and communication processes, legacy issues and implementation strategies.

c. Document the contributions and relevance of the QWP to improve the knowledge base and capacity of resource managers in relation to wetland management in Queensland.



d.Document the key learnings and the key factors to be considered for future collaboration in wetland management.

### Outputs

- e. A final report, incorporating recommendations based on the findings from outputs 3a-d, evaluating the effectiveness of the QWP in relation to key constraints, gaps, risks and opportunities.
- f. Presentation of the final report (Item 3e) and articulation of the findings which will be used to support the development of a recommended process for identifying, prioritising & designing future strategic joint investment in wetlands initiatives with multiple stakeholders.

### **4.OBJECTIVES**

The primary objectives of this consultancy are to evaluate the effectiveness of the QWP including project success in meeting their objectives and overall QWP goal and objectives as well as the arrangements and processes used to implement the Programme. In doing this, the evaluation should reflect on lessons learnt, identify improvements and provide recommendations on the way forward for collaborative wetland management.



### **Appendix B: Desktop Analysis: Project Assessment**

	Project Assessment	Project Name
	Project Goal	What are the key goals/objectives of the project?
		Are there priority objectives and secondary objectives?
_	Project Outputs	What are the key proposed outputs of the project?
Anticipated		Are there priority outcomes and secondary outcomes?
Antic	Project Outcomes	What are the anticipated project outcomes?
		Were end users identified in projects?
	Focus Area Outputs	Note: relevant Focus Area outputs from the Monitoring, Evaluation and Reporting Strategy for the Queensland Wetlands Programme (2005) to be inserted for each assessment.
	Efficiency Assessment (especially considering	Was the project achieved on, under or over time? If so, what were the key reasons for such a result?
	Focus Area outputs)	Was the project achieved on, under or over budget? If so, what were the key reasons for such a result?
		Were people with appropriate skills involved in the project?
	Effectiveness	Did the project achieve the stated objectives, outcomes and outputs?
	Assessment (especially considering Focus Area	Did the project achieve any unexpected outcomes and outputs?
g	outputs)	What was the quality of the products produced as part of the QWP?
Project Evaluation	Integration Assessment	How does the project align, and is it consistent with other projects in the wetlands programme?
oject		Have other projects used the project results?
Pı		What was the level of integration with key stakeholders? Was it sufficient? If not, why not?
		How has the project assisted wetlands planning and management?
	Consultation,	How are stakeholders more informed about wetlands from the project?
	Engagement & Communication	Was there appropriate stakeholder engagement and feedback?
	Assessment	Was there a consistent and transparent approach to reporting?
		Does the project have realistic and measurable targets with monitoring and evaluation to measure wetland management outcomes?



	Project Assessment	Project Name
		Did the Communication Strategy achieve its objectives?
		[Note: Key learnings are to be addressed below]
	Knowledge Base and Capacity Assessment	What was the knowledge base (i.e. zero, partial or extensive etc)?
		How has the project improved the wetland information base?
		How has the project contributed to extending the knowledge base on wetlands?
		How are stakeholders more informed about wetlands? [Communication]
		How has the information from the project assisted other projects [Integration]
		How has the information been made more accessible to decision makers?
		What systems have been established to store, record and maintain the information to be complementary to other State and National NRM datasets?
		How has the capacity for managers to implement and maintain wetlands increased/improved?
	Key Learnings	What are the key learnings as they relate to wetland management?
		What were the underlying assumptions applied to the programme in terms of focus areas and projects and how might these need to change for any future implementation?
		Are there examples of adaptive management and continual improvement?
		What innovations (technological, capacity building, cost-sharing, co-investment) have been incorporated into wetlands management activities?
ations		Have future opportunities been identified as a result of the project?
nd Observ		[Note: lessons learnt will be identified as they relate to communication, stakeholder engagement, integration, project management etc.]
luation ar	Key Constraints	What were the key constraints or obstacles to achieving the project's outcomes and objectives?
Overall Evaluation and Observations		Were there any organisational/institutional constraints to achieving the objectives and outcomes?
Ó		Were there consultation and stakeholder engagement obstacles?
		Were identified constraints successfully navigated, or were they were insurmountable?  How?
		Are there any remaining legacy issues?
	Overall Contribution to QWP	How has the project contributed overall to the QWP?



### **Appendix C: Survey Questions**

### **Queensland Wetlands Programme Evaluation Survey 2008**

for the Queensland Department of Natural Resources and Water

You are invited to complete this survey to contribute to the Queensland Wetlands Programme evaluation.

### **Survey Instructions**

The following survey is presented in four main sections, being:

- Part A General Information.
- Part B Queensland Wetlands Programme (questions relating to the overall Programme).
- Part C QWP Projects (questions relating to specific projects within the overall Programme).
- Part D Questions about the design of this survey.

Respondents should complete all sections where prompted. Respondents with limited involvement with the Queensland Wetlands Programme need only complete Parts A, B and D of the evaluation survey. Respondents with targeted involvement with QWP project(s) but less involvement with the overall programme, need only complete parts A, C and D.

The evaluation survey is primarily presented in a 'statement and response' format (unless otherwise specified). For the majority of statements the respondent is asked to select whether they:

- 1. Strongly agree with the statement
- 2. Agree with the statement
- 3. Neither agree or disagree with the statement
- 4. Disagree with the statement
- 5. Strongly disagree with the statement,

Unable to respond.

Respondents should select the option that is most appropriate to them. For those questions not presented in a 'statement and response' format, respondents should follow specified directions.



### **Part A: General Information**

Please complete the following table:		
Respondent Name:		
Organisation:		
Position:		
Email:		
Telephone (work):		
I was involved in the Queensland Wetlands Programme as a:		
[Tick all boxes that apply]		
☐ Project leader		
☐ Project participant		
☐ Departmental or agency officer		
Researcher		
☐ Local government officer		
☐ Board or Committee member of a regional NRM body		
☐ Staff member of a regional NRM body		
☐ Landholder		
☐ Traditional Owner		
☐ Teacher, student, etc		
☐ Stakeholder representative (e.g. industry, community, etc.)		
☐ Other [please specify]:		
I would rate my level of involvement in the Queensland Wetlands Programme as:		
[Tick the box that is most relevant]		
High: strongly aware of the Programme and deeply involved with specific projects.		
Moderate: aware of the Programme and some involvement with specific projects.		



<b>Targeted:</b> high level of detailed knowledge in a particular project but lacking in-depth knowledge of the broader Programme.
Low: limited awareness of the Programme and not specifically involved with projects.

### Part B: Queensland Wetlands Programme Survey Questions

The following section relates to the overall Queensland Wetlands Programme. Respondents should select the most appropriate answer, unless otherwise specified.

[Questions are to be answered using a 1 to 5 scale: 1 = Strongly agree; 2 = Agree; 3 = Neither agree or disagree; 4 = Disagree; 5 = Strongly disagree; Unable to respond]

- 1. Overall, the Programme has supported projects that "will result in long-term benefits to the sustainable use, management, conservation and protection of Queensland wetlands".
- 2. The Programme has produced quality products and outcomes to improve wetlands management.

### Wetlands information base

3.	Stakeholders have become more informed about wetlands through the Programme.	
4.	Which key stakeholders have become <b>most informed</b> about wetlands through the Programme?: [Select two from the list]	
	a. Departmental or agency officer	
	b. Researcher	
	c.  Local government officer	
	d.   Board or Committee member of a regional NRM body	
	e. Staff member of a regional NRM body	
	f. Landholder	
	g.   Traditional Owner	
	h. Teachers, students, etc	
	i. Stakeholder representative (e.g. industry, community, etc.)	
	j. Other [please specify]	
	k.  Unable to respond	
5.	Wetlands information has become more accessible to decision-makers through the Programme.	

- 6. The Programme has improved the wetlands information base (ie. through the documentation, recording and storage of information on wetlands).
- 7. The Programme has extended the wetlands knowledge base (ie. through improved access to information and understanding of wetlands).



### Wetlands planning arrangements

- 8. Changes have been made to Natural Resource Planning arrangements to improve wetland condition and extent as a result of the Programme.
- 9. Regional Natural Resource Management plans recognise and support the management of wetlands as a result of the Programme.

### On-ground activities to protect and rehabilitate wetlands

- On-ground activities through the Programme have improved the condition and extent of wetlands.
- 11. There are external barriers to implementation of on-ground activities through the Programme.
- 12. What, if any, are the **key external barriers** to implementation of on-ground activities through the Programme. [Please specify the top three barriers]
- 13. There is effective monitoring, evaluation and reporting of on-ground activities through the Programme.

### Education and capacity building

- 14. The Programme has improved stakeholder awareness of wetlands issues.
- 15. The Programme has assisted identification of problems with wetlands management.
- 16. The Programme has assisted the provision of solutions for wetlands management.
- 17. The capacity of land managers to enhance wetland condition has improved through the Programme.

### Communication, monitoring, evaluation and reporting

	, , , , , , , , , , , , , , , , , , , ,
18.	There was effective communication and distribution of Programme products and outcomes
19.	Programme consultation and engagement was comprehensive and effective.
20.	Which two key stakeholders were <u>least engaged</u> through the Programme?:
	a. Departmental or agency officer
	b. Researcher
	c.  Local government officer
	d.   Board or Committee member of a regional NRM body
	e.   Staff member of a regional NRM body
	f. Landholder
	g. Traditional Owner



Sustainable Futures  Sustainable Futures
<ul> <li>h.</li></ul>
21. There was regular and transparent Programme monitoring and reporting.
Governance and administration
<ol> <li>Governance structures provided effective oversight of the Programme (e.g. Queensland Wetlands Joint Government Taskforce, project committees, etc).</li> </ol>
23. Contract design and approval processes were efficient and appropriate.
<ol> <li>Programme reporting processes provided relevant information on overall progress and project achievements.</li> </ol>
Integration
25. There was effective integration of projects within the Programme.
26. There was effective integration of the Programme with other initiatives.
<ol> <li>The Programme demonstrated an adaptive management and continuous improvement approach.</li> </ol>
Overall performance [requiring written responses]
28. What are the <b>key learnings</b> from the Programme to be considered for future collaboration in wetlands management. [Please give examples]
29. What are the key constraints, gaps or risks with the Programme. [Please give examples]
30. Are there any legacies (positive or negative) or follow-up actions that will remain after the Programme. [Please give examples]
31. Please provide any <u>additional comments</u> below in relation to the overall Programme.
Part C: QWP Project Survey Questions
Please identify the primary QWP project that you were most directly involved with: [Please enter the QWP project name]
Project name:



The following section relates to the specific QWP project that you have identified above. Respondents should select the most appropriate answer as it relates to that project (unless otherwise directed). Some questions may not be applicable for all projects.

[To be answered using a 1 to 5 scale: 1 = Strongly agree; 2 = Agree; 3 = Neither agree or disagree; 4 = Disagree; 5 = Strongly disagree; Unable to respond; Not applicable]

### Wetlands information base

١.	Stakeholders have become more informed about wetlands through the QVVP project.
2.	Which key stakeholders have become <b>most informed</b> about wetlands through the QWP project. [Select two from the list]
	a. Departmental or agency officer
	b. Researcher
	c.  Local government officer
	d.   Board or Committee member of a regional NRM body
	e.  Staff member of a regional NRM body
	f. Landholder
	g.   Traditional Owner
	h.  Teacher, student, etc
	i. Stakeholder representative (e.g. industry, community, etc.)
	j.
	k. Unable to comment.
3.	Wetlands information has become more accessible to decision-makers through the QWP project.
4.	The QWP project improved the wetlands information base (ie. through the documentation, recording and storage of information on wetlands).

5. The QWP project extended the wetlands knowledge base (ie. through improved access to information and understanding of wetlands).

### Wetlands planning arrangements

- 6. Changes have been made to Natural Resource Planning arrangements to improve wetland condition and extent through the QWP project.
- 7. Regional Natural Resource Management plans recognise and support the management of wetlands through the QWP project.



### On-ground activities to protect and rehabilitate wetlands

- 8. On-ground activities through the QWP project have improved the condition and extent of wetlands.
- 9. Following the on-ground activities undertaken through the QWP project, what on-going actions are now required? [Please specify]
- 10. There are external barriers to implementation of on-ground activities through the QWP project.
- 11. What, if any, are the **key external barriers** to implementation of on-ground activities through the QWP project. [Please specify the top three barriers]
- 12. There is effective monitoring, evaluation and reporting of on-ground activities through the QWP project.

### Education and capacity building

- 13. The QWP project has improved stakeholder awareness of wetlands issues.
- 14. The QWP project has assisted identification of problems with wetlands management.
- 15. The QWP project has assisted the provision of solutions for wetlands management.
- 16. The capacity of land managers to improve wetland condition has improved through the QWP project.

### Communication, monitoring, evaluation and reporting

- 17. There was effective communication and distribution of QWP project products and outcomes.
- 18. Project consultation and engagement was comprehensive and effective.
- 19. There was regular and transparent project monitoring and reporting.

### Governance and administration

- 20. Governance structures provided effective oversight of the QWP project (e.g. Queensland Wetlands Joint Government Taskforce, project steering committee, working groups, etc).
- 21. Contract design and approval processes were efficient and appropriate for the QWP project.
- 22. Project reporting processes provided relevant information on progress and project achievements.

### Integration

- 23. There was effective integration of the QWP project with other projects within the Programme.
- 24. There was effective integration of the QWP project with other initiatives.



25. The QWP project demonstrated an adaptive management and continuous improvement approach.

### Overall project performance [requiring written responses]

- 26. What are the **key learnings** to be considered for future collaboration in wetlands management from the QWP project. [Please give examples]
- 27. What are the key constraints, gaps or risks with the QWP project. [Please give examples]
- 28. Are there <u>any legacies (positive or negative) or follow-up actions</u> that will remain after the QWP project. [Please give examples]
- 29. Please provide any <u>additional comments</u> below in relation to the specific QWP project you identified above.

### **Part D: Survey Questions**

- 1. I was able to easily access the website and complete the survey on-line.
- 2. The survey questions targeted information relevant to evaluate the performance and outcomes of the Queensland Wetlands Programme.
- 3. How long did it take you to complete this survey?

The End

### **Halcrow Pacific Pty Ltd**

### Melbourne

Level 1, 542 Station Street, Box Hill, Melbourne, VIC 3128 Tel +61 3 9899 9777 Fax +61 3 9899 1214

Level 22, 68 Pitt Street, Sydney, NSW 2000 Tel +61 2 9250 9900 Fax +61 2 9241 2228

### Brisbane

Suite 758, 320 Adelaide Street, Brisbane, QLD, 4000 Tel +61 7 3010 9272

www.halcrow.com