

# **NORTHERN AUSTRALIA IRRIGATION FUTURES**

## **REPORT ON THE BRISBANE WORKSHOP WITH QUEENSLAND GOVERNMENT AGENCIES**

Brisbane  
3 August 2004



**WATER FOR A HEALTHY COUNTRY**  
National Research Flagship



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## **Executive Summary**

1. The purpose of the workshop was for the Northern Australia Irrigation Futures (NAIF) project to inform Queensland Government State Agencies about the NAIF Sustainability Framework and where possible to seek alignment between Government needs and NIAF Sustainability Framework capabilities
2. The workshop was held at Mineral House, 41 George Street, Brisbane on the 3<sup>rd</sup> August 2004 and involved 20 participants
3. Support for the Sustainability Framework and the potential benefits it could deliver to Queensland Government processes grew through the course of the workshop
4. Specific benefits of the Sustainability Framework to Queensland State Agencies were identified.
5. The need for the NAIF project to develop a communication strategy and to maintain effective consultation with a broad range of stakeholders was highlighted
6. The Queensland Government State Agencies were keen to work with the NAIF project in:
  - developing the NAIF Stage 2 Work Plan to ensure synergy with water planning
  - developing the communication strategy and stakeholder engagement plans
  - defining project deliverables
7. Most participants felt a case study would be useful in supporting development of the sustainability framework and suggested that the lower Burdekin should serve as the main Queensland case study site. There were some comments that we need to 'fix' existing systems before embarking on establishing new systems

## 1. Introduction

The purpose of the NIAF Queensland Government workshop was to ensure that NIAF team members understand existing and emerging government processes so that the sustainability framework will be developed to help meet Agencies' needs in addressing future and existing irrigation developments, particularly in north Queensland. This specific workshop was held in the context of other ongoing consultation processes with a wide group of stakeholders across northern Australia.

The workshop was held at Mineral House, 41 George Street, Brisbane on the 3<sup>rd</sup> August 2004.

The agenda is given in Appendix 1 and the list of participants in Appendix 2.

The objectives of the Brisbane workshop were to:

- introduce the Northern Australia Irrigation Futures project and the planned sustainability framework - its nature and potential benefits
- obtain a better understanding of Queensland government initiatives regarding irrigation development in northern Australia
- identify needs of the Queensland Government and the benefits that can accrue from and possible barriers to developing the NIAF sustainability framework
- identify preferred features of, and issues to be addressed by, the framework
- discuss possible arrangements for partnering the development and use of the framework

Keith Bristow and Bart Kellett provided a brief description of the NIAF project and its current status. The concept of the NIAF Sustainability Framework was explained, the aim being to help support more robust debate and improved decision making regarding:

- if and where to irrigate in tropical Australia, what tropical irrigation systems could look like, and how they should be managed to meet social, cultural, environmental and economic sustainability objectives
- the performance of existing irrigation systems which will help determine if any changes are necessary

The aim is to not repeat the mistakes made in southern Australia where a good deal of irrigation development had proceeded without due knowledge and consideration of the broader biophysical and landscape context. There was now the opportunity in the north of approaching irrigation development and management in a different manner by improving our understanding of northern Australian landscapes and how they interact with our changing social and economic conditions.

The Government participants were then invited to comment on what they had heard, their needs in terms of addressing irrigation related issues in northern Australia, and how the NIAF Sustainability Framework could evolve to help address Agencies' needs.

## **2. Comments on the sustainability framework**

Participant comments on the proposed NAIF Sustainability Framework included some key questions:

- what information captures an understanding of landscape function ?
- how indicators link with landscape function ?
- what scale/s the indicators and knowledge of landscape function are applicable to ?

It was suggested that the framework won't be able to deliver a model that captures the overall function of landscapes. It was proposed that the framework must draw on information and models already developed.

Particulars of the framework's application were also questioned, for example will the framework be applied at the farm or catchment scale ?

By the end of the session most felt that the framework would be most useful at the scheme and catchment scales. Some Natural Resources Mines and Energy (NRM&E) participants felt that the main users will be private operators and regional NRM bodies.

Most participants agreed that a case study would be useful in supporting development of the sustainability framework. There was support from State Development and Innovation and NRM&E for the lower Burdekin to serve as the main Queensland case study site. There were some comments that we need to 'fix' existing systems before embarking on establishing new more sustainable systems.

## **3. Potential benefits of the sustainability framework to Queensland State Agencies**

State agencies were asked 'what opportunities does the NAIF Sustainability Framework present to you ?' Responses included:

- Opportunities to inform the setting of catchment based targets for resource condition and management
- Improved understanding of functioning of catchments with irrigation
- Identify management actions that achieve catchment based targets, particularly in an economically feasible way
- Plan sustainable developments before implementation rather than rehabilitate developments that are unsustainable
- Benchmark catchments with irrigation
- Demonstrate to the community that we can manage schemes in a sustainable way
- Contribute to catchment scale planning by providing information to the water resource planning process – three mechanisms exist: contribute to planning currently underway, contribute to the review of plans, and trigger plan reviews
- The sustainability Framework should help us:
  - Rethink the development paradigm;
  - Focus on schemes that will be representative of the future;
  - Identify for private developers what kind of schemes are sustainable;
  - Define the difference between mining a resource and using a resource in a sustainable way;

- Define the role of a license to farm – it was suggested that this is more successful when applied at the district scale rather than the farm scale; and
- Help find flexible ways to meet legislative compliance needs.

#### **4. Opportunities for State Agencies to contribute to the NAIF project**

It was proposed that State Agencies should liaise with the NAIF project through Allan Dale who is a member of the NAIF Steering Committee. Possible contributions could include:

- Involvement in the development of the NAIF Stage 2 Work Plan to ensure synergy with water planning, particularly in stakeholder engagement
- Involvement in the development of the NAIF Communication Strategy
- Assist in defining possible deliverables

#### **5. Recommendations made to the NAIF project team**

State Agency participants offered recommendations to progress the NAIF project. These included:

- Effective consultation is more important than timelines and delivery
- Conduct a north Queensland NAIF workshop (include EPA, NRM&E and other State Agencies and community / industry stakeholders)
- Investigate water produced from the dewatering of mines in north west Queensland
- Be aware of legislative and regulative frameworks used for water resource planning and ensure deliverables can contribute and are compatible
- Need to address triple bottom line and offsets
- Investigate the implications of irrigation mosaics for groundwater function and management
- Identify irrigation systems that should be shut down
- Compare the sustainability and the performance of the following:
  - catchments with irrigation
  - different crops systems (e.g. rice versus sugar)
  - different irrigation systems (e.g. groundwater storage versus surface water storage)
- Regional development and indigenous development is of interest for State Development
- Identify how to make existing schemes sustainable before considering new schemes
- Identify a way to better facilitate the functions of the stakeholder network
- Make the consultation process as wide as possible to make outputs more acceptable
- The NAIF Steering Committee should refine the stakeholder consultation process
- Manage expectations

#### **6. Issues for the NAIF project team to follow up**

Suggestions were made by participants concerning information that should be sourced and people who should be contacted to assist the NAIF project:

- Gulf land and water assessment reports
- Murray Whitehead at EPA in Townsville; to obtain a local EPA perspective
- The Landmark and Watermark projects conducted through the MDBC

- Representatives from Cubbie Station; to obtain a developers' perspective
- Other private operators; to obtain a perspective on how to undergo new irrigation development

## **7. General Comments**

Participants also offered a range of general comments throughout the meeting that do not fall under the sections above. These included:

- I did not realise the importance of the groundwater – irrigation link.
- I am surprised at the large area that this project intends to cover.
- Your presentation dispelled some myths and inhibitions concerning this project.
- This project presents exciting possibilities and is a good example of engagement.
- Industry and regional NRM bodies involvement is paramount.
- Engage industry sector in broader landscape sustainability debate while these sectors are being re-engaged.
- The NAIF project is a good investment for CRC Irrigation Futures, particularly in the area of sustainability assessment.
- This stakeholder network is useful for the project.
- The States and Territory's views (concerning the project) are remarkably similar although some issues could be unique for each State and Territory.
- Positive to see whole of Government approach for Queensland with engagement with the Commonwealth.
- This project could be a saviour to the immense problems that have occurred in the north.
- Expectations are realistic and more keenly defined while awareness has been well raised.
- Process to alleviate failures that have occurred in the past.
- Getting down to detail of deliverables must be driven by what is achievable.

## **8. Acknowledgements**

There are a growing number of people around the country who want to see real on ground improvements in the way we manage our water, irrigation systems and natural environment and we acknowledge and thank them for their support and input.

We thank Allan Dale and Glen Starkey from Natural Resources Mines and Energy for their ongoing assistance and for hosting this particular workshop.

This work is funded in part by the LWA National Program for Sustainable Irrigation, CRC Irrigation Futures, and CSIRO Water for a Healthy Country Flagship Program and we thank them for their support.

## **Appendix 1 Agenda**

### **NAIF Brisbane workshop with Queensland Government Agencies 3 August 2004, Brisbane**

#### **Agenda**

2:00pm - 2:45pm

- Keith Bristow to provide an overview of the NAIF project
- Peter Gilbey - brief summary of the NAIF Darwin Workshop

2:45pm - 4:15pm

- Agencies to address:
  1. how this project impacts on their work
  2. the benefits NAIF might bring
  3. needs that can be satisfied by NAIF research
  4. key requirements which the agencies might have in relation to the progression of the project.

4:00pm - 5:00pm

- General discussion and way forward.

## Appendix 2 Participants

Attendees of the workshop and their respective organisations are listed in Table below

### NAIF BRISBANE WORKSHOP PARTICIPANTS

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