

Sustainable Water Forum

**Cairns Convention Centre
3 September 2009**



The Australian Government's Northern Australia Land and Water Taskforce is looking at opportunities for sustainable development in northern Australia.

The Taskforce is:

- finding new opportunities for development in the north, based on sustainable water use (including non-consumptive uses);
- reporting on the potential impacts of new developments; and
- identifying new governance and institutional arrangements for the effective management of water resources.

The Sustainable Water Forum in Cairns was hosted by Taskforce members Dr Ro Hill and Mr Michael Roche.

Taskforce members provided an overview of the Taskforce role, its history and Terms of Reference. Small group discussions were then facilitated for agriculture, industry and conservation sectors, focusing on the Taskforce's Terms of Reference. The forums concluded with a general discussion and final comments from the Taskforce members.

The Taskforce presents its final report to the Australian Government at the end of 2009.

The information and the issues identified by participants of the Cairns Sustainable Water Forum are provided here as notes from the discussions.

Sustainable Water Forum
3 September 2009, Cairns Convention Centre
Attendees

Jeremy Blocky	Rob McAlister
Moni Carlisle	Cr John Maloney
Cr Annie Clarke	Charlie Martens
Jann Crase	Dr Paul Messenger
Christine Cousins	Dr Nicky Moore
Bruce Corcoran	Joe Morro
Donald Coventry	John Nucifora
Cr Warren Devlin	Lyn O'Connor
Peter Elliot	Sean O'Neill
Glen Graham	Robert Zigterman
Andrew Harnden	Lawrence Stonehouse
Louise Hateley	Daniel Stremomchiw
Bood Hickson	Kate Sutcliffe
Tim Hoogwerf	Colleen Taylor
Trevor Jackson	Henry Taylor
Nigel Kelly	Julie Tsatsaros

Taskforce Members: Dr Ro Hill and Michael Roche
Taskforce Secretariat: Barbara Wheeler and Lauren Kitscha

Breakout Session Notes

Agriculture

New Opportunities for Development – Based on Sustainable Consumptive and Non-Consumptive Water Use

- Better use of water for economic diversity will bring multiple benefits that will support regional populations eg innovations in beef production include growing fodder, returning nutrients to pasture through effluent management, processing product locally and localising the supply chain to minimise carbon miles
- Appropriate enabling infrastructure is required including water storage, roads and power, housing education and health
- The economic sustainability of agriculture in the north is being seriously limited by low returns for product and high cost structures. Research is needed to determine viability of the sector
- An adaptive research strategy is needed that identifies markets and engages the new CRC

Potential Impacts of New Development

- Sand mining is having potentially devastating impacts near Dimbula
- Water is the basis for stimulating enterprise
- Saline problems and acid sulphate soils mean that there are poor agricultural soils
- Erosion is increasing sediment accumulation in rivers which affects agriculture and fisheries

Agriculture *Potential Impacts* (continued)

- There is an increased pest and weed threat as more land is opened up for agriculture
- Maintaining water quality is a high priority
- In planning for new development we need to be aware that climate variability, especially the impact of increased temperatures, will have an impact
- Economic development needs to be focused so that it positively impacts disadvantage and Closing the Gap and also anchors populations in regional areas

Governance and Institutional Arrangements for Effective Management of Water

- Governance needs to be founded on meaningful conversations that:
 - Allow more time
 - Have better processes
 - Provide more transparency
 - Build confidence and
 - Are decentralised to regional communities
- Practical advice to government need to be reflected in policy and regulation
- Native Title considerations need to be addressed with Traditional Owners
- There needs to be a regional planning outlook and stop the Brisbane-centric Approach

Industry

New Opportunities for Development – Based on Sustainable Consumptive and Non-Consumptive Water Use

- Non consumptive uses often rely on consumptive users to bring about potential; Social and economic linkages eg Western Cape York bauxite mining in general and the Pisolite Hills project in particular has capacity to provide benefits such as jobs and education and Mapoon may become a transport hub
- Whole of community approach through partnerships
- Impacts of Government decision son economic development eg Wild Rivers legislation and world heritage listing made in isolation from communities
- Use existing consumptive use of water to drive economic development
- Mining
- Exports via ports such as Burketown and Karumba
- Agriculture eg Gilbert River irrigation proposals
- Feedlots and feed crops
- Abattoir
- Westmorland uranium
- Tourism
- Hydropower for renewable energy returns water to rivers
- Food source

Potential Impacts of New Development

Case study of Pisolite Hills as best practice in sustainability may be useful in terms of jobs (100's); royalties and tax revenue; export income; education and training; enabling infrastructure development; enterprise opportunities; requires 0.1 -0.3 of annual river flow; EIS identifies environmental features and

Industry Potential Impacts (continued)

- demonstrates environmental protection with economic development; EMP required
- Workforce: fly-in; fly-out
- Need exit plan and consideration of impacts of withdrawal of project eg Century. Employment and infrastructure; re-use rather than rehabilitate to provide a basis for other sustainable industries
- Potential – development projects tend to be very significant, relative to north Australian communities
- Consumptive uses are coming off a low base

Governance and Institutional Arrangements for Effective Management of Water

- Regulation needs to be scaled to relative size of project ie not one size fits all eg monitoring, buffers around riparian zones need to be appropriate (science based, reflective of actual features not lines on a map)
- Economic rationale often stifles activity and needs broader vision that considers more than just cost, the long distances, small population to realise the shared benefits of energy , roads and ICT
- Get away from Indigenous and non-Indigenous separation. We need to work together in partnerships that create critical mass
- Reform of land tenure and zone tax allowances is required. Also revamp outdated royalties structure
- Impact of Carbon Pollution Reduction Scheme on remote communities needs to be considered (eg increased cost of energy). It is already more expensive to live in remote locations
- CPRS will also drive exports
- Think differently for example around communities of interest along transport corridors/routes eg state government departments based in Cairns, Townsville and Mt Isa don't communicate effectively. State and federal inter-agency relationships also need to improve
- Emphasise east west nature of northern Australia



Participants at the Cairns Forum

Conservation

New Opportunities for Development – Based on Sustainable Consumptive and Non-Consumptive Water Use

- Various uses of water in the north are heavily dependent on hydrocarbons (fossil fuels) eg residential, commercial, industrial, agricultural and transport
- Local food production will become more important as the cost of oil increases re peak oil
- There are new opportunities in ecologically sustainability development of water resources (environment, economic and social)
- Alternative energy such as biofuels and solar
- New opportunities need to consider the rate of oil depletion, linked to GDP
- Localised agriculture is less transport dependant. Also localised inputs of fuel and fertilizers
- Ground water is invisible and poorly understood. Lack of certainty and knowledge means reliance on modelling with error potential
- Need more field data
- Policy experts and researchers are not spending enough time in fieldwork. Need to integrate local stakeholder and farmer knowledge (experiential knowledge) towards models for determining water supply
- Recreational opportunities need to consider costs of air and vehicle transport
- Work and recreation space (local) based economies
- Nature based tourism accessing natural areas with low energy use transport
- Carbon capture based economies
- Tropical based education and expertise for sustainable development and living
- Water and land efficiency in agriculture eg mulches, non chemical spraying

Potential Impacts of New Development

- Pollution from abandoned mines through run-off and leaching
- Problems in Murray-Darling originated down or upstream?
- We've developed projects without an overall understanding of impacts as in the Murray-Darling. We need to know what the environmental needs are eg prawn industry
- Seasonality, particularly with water flows and uses
- Agricultural projects and practices may be accelerating climate change
- Environmental flows (interconnections) need to be understood eg Barramundi need dry season pools
- Environmental flows must be accurately determined on an ecological basis

Governance and Institutional Arrangements for Effective Management of Water

- Opportunities for developing more realistic water quality standards and guidelines that reflect local conditions? Eg north QLD is different to south QLD
- Need to modify traditional western temperate methods to Australian situation
- Need realistic, inclusive vision for northern Australia
- Institutional framework should be based on the model of localised economies, for sustainability
- Catchment based planning and regional planning is important. Institutional boundaries should reflect catchment boundaries
- Regional plans in Queensland should define urban footprint and priority infrastructure plans (PIPs)

Conservation Governance (continued)

- Need proper water plans based on real needs not the political boundaries/needs
- Need Federal oversight of water planning utilising an effective collaborative process. Federal overview would need to incorporate local needs and knowledge.
- Need for a Northern Australian Commission/Agreement/stakeholder process towards water planning. Suggest this body have representatives from each catchment
- Quality water planning in advance of development
- Need an independent scientific research institution to input to the process
- Indigenous water and land use rights should also be part of the process
- Amend the Water Act to include Indigenous rights and interests and a definition of what a channel is
- Broader civil society should also be represented in water planning: conservation community, other local organisations, business community
- To integrate the knowledge/capacity of all stakeholders and expertise requires effective outreach and communication
- A broader regional body that is ongoing and funded is needed to represent all local interests, knowledge and expertise

Concluding General Discussion

As in Darwin, there was discussion of the need for sustainable development, but the priorities for achieving it were not agreed.

Water is seen as a stimulant for local enterprise, but there are social and hard infrastructure deficits that to be addressed

Enabling infrastructure to facilitate consumptive uses will also assist non consumptive uses such as tourism and conservation and cultural economies

Governance needs new thinking that values stakeholder input, (local and expert) for example a Northern Australia Commission.

A new deal is required for agricultural producers to achieve sustainability. Cost structures need to be analysed to understand economic sustainability.

Environmental flows should be assessed on an ecological basis.

Regulations be appropriate to the size of the development.

Some participants were 'livid' that the same mistakes of the south will be made in northern Australia unless planning instruments are reviewed, eg EIS

Local and leaders are prepared to lead their communities in a dialogue with government about water planning, infrastructure, because they see water as a stimulus for northern Australia.

There was general support for a bottom up approach, a cooperative partnership between government, communities and science for landscape level planning eg 'thrash it out in a basin' with capacity building so that consensus can be reached.

There was a request from the forum that the Taskforce recommend to the Australian Government that it engage further with the people of northern Australia



Participants at the conclusion of the Cairns Forum