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Aboriginal Water Knowledge & Connections

Australian Academy of Technological Sciences and Engineering (ATSE)

Water and its Interdependencies in the Australian Economy

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National Research
FLAGSHIPS

Water for a Healthy Country



Background

Identify:

- Who I am as identity is important
- That Aboriginal people in public life wear many hats
- Key drivers for the area of Aboriginal Water Knowledge and Connections
- Its impacts on other areas

Key Driver - Survival

- Aboriginal people are still here
- Aboriginal people's ability to survive in and understand the Australian landscape is astounding this equates to:
 - Traditional Cultural Knowledge
- A precise classification system was developed for water sites
 - Aboriginal people know how to find and re-find water
- **BUT, Aboriginal people are still not part of the “western” equation in identifying how and where water flows in Australia**

Aboriginal Water Knowledge

A hypothetical addition:

$$D + TLC = 5000+/-$$

D = The “Dreaming”

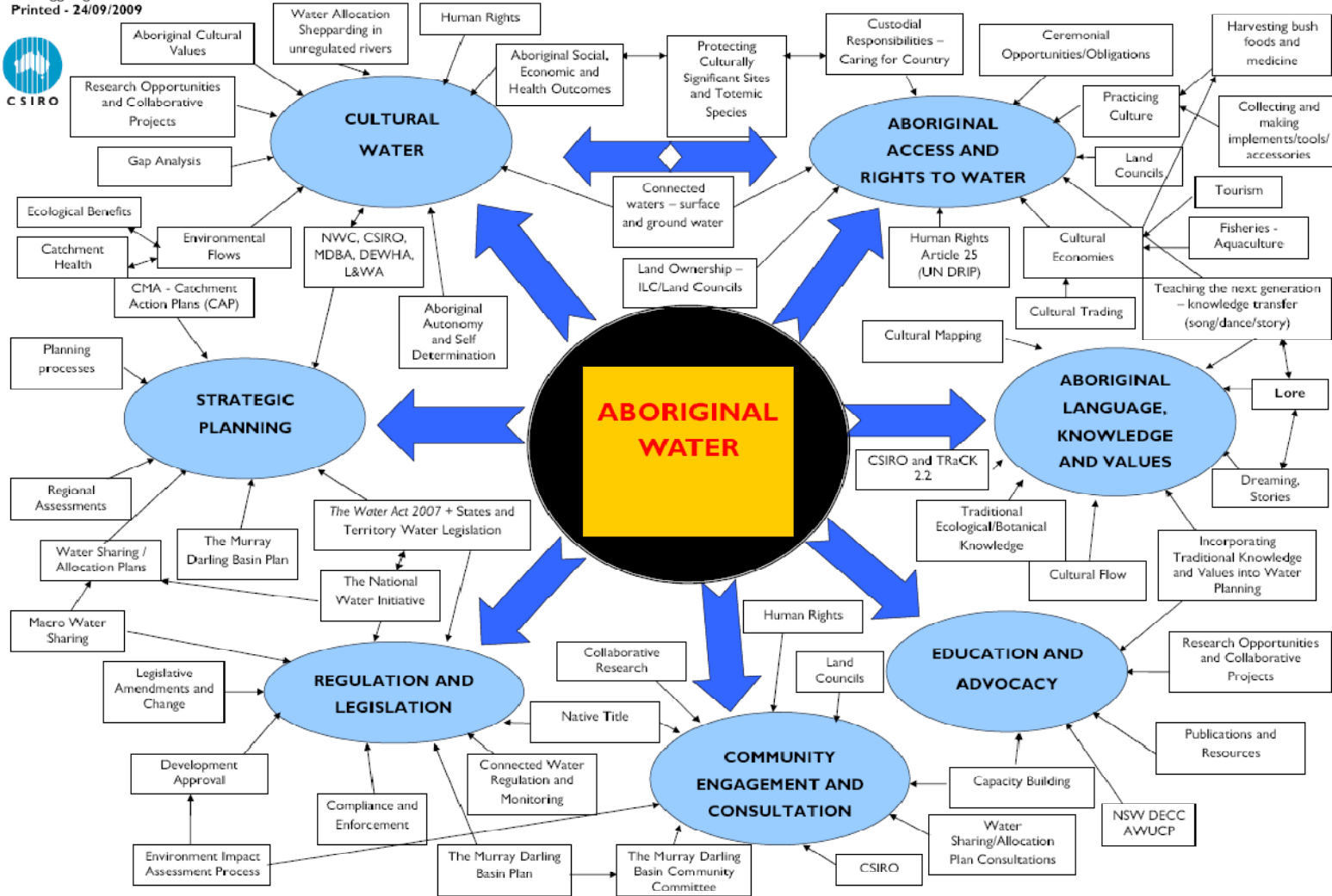
TLC = Traditional Lore and Customs

5000+/- Survival for 5000 generations of traditional knowledge and survival on the driest inhabited continent on earth

*Based on 20-22 years = 1 Generation (Wikipedia)

Aboriginal Water Conceptual Model

B. Moggridge
Printed - 24/09/2009



Opportunities - National Water Initiative

- The National Water Initiative of 2004 for the first time explicitly recognised Indigenous rights and interests in national water policy (**paragraph 25(ix)**):
recognise indigenous needs in relation to water access and management

Paragraphs 52–54

Indigenous Access

52. The Parties will provide for indigenous access to water resources, in accordance with relevant Commonwealth, State and Territory legislation, through planning processes that ensure:

- i) inclusion of indigenous representation in water planning wherever possible; and
- ii) *water plans* will incorporate indigenous social, spiritual and customary objectives and strategies for achieving these objectives wherever they can be developed.

53. Water planning processes will take account of the possible existence of native title rights to water in the catchment or aquifer area. The Parties note that plans may need to allocate water to native title holders following the recognition of native title rights in water under the Commonwealth Native Title Act 1993.

54. Water allocated to native title holders for traditional cultural purposes will be accounted for.

Second Biennial Assessment of NWI 2009

- **Finding 1.6** It is rare for Indigenous water requirements to be explicitly included in water plans.....
- **Finding 6.7** Water to meet Indigenous social, spiritual and customary objectives is rarely clearly specified in water plans.
- The Third Biennial Assessment is due in 2011
 - Will it be a cut and past from the 2009 Assessment?
- The formation of the *First Peoples' Water Engagement Council* just recently will assist the NWC:
 - to incorporate Aboriginal and Torres Strait Islander perspective into NWC processes and projects
 - to hopefully move on from a cut and past scenario

UN Declaration

- On 3 April 2009 the Australian Federal Government gave its support to the United Nations Declaration on the Rights of the Indigenous People, and for the purpose of this presentation **Article 25** is of relevance as it states:

Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard.

Word Break



Brewarrina Aboriginal Fish Traps
- Barwon River

Ngemba Mission Billabong
- Barwon River



Value of Water to Aboriginal People

- Aboriginal peoples' value to water is sacred, deep and necessary for survival. It is protected by Lore, which provide a system of sustainable management ensuring healthy people
- Aboriginal people's connection with Country does not separate the individual features of the landscape
- Non-Aboriginal laws and traditions separate water from the land and from the sky
- Aboriginal cultural and economic values associated with waters are poorly understood by water resource managers including the cultural economy (i.e. 1 echidna may equal 3 yellow bellies)
- Aboriginal people are critical of water managers for the exclusive focus given to satisfying ecological criteria in environmental watering

Cultural Flow

- Aboriginal people rely heavily on rivers, groundwater and wetlands to access their values both tangible and non-tangible,
- Many values require a flow to be sustained, otherwise the story is lost
- The terms Cultural Flow or Cultural Water have been mentioned and described in a number of published papers and reports
- In a report to the NSW Healthy Rivers Commission by Behrendt and Thompson 2003 state that:

Cultural flows should be an essential component of river management. A 'cultural flow' can be set and monitored as sufficient flow in a suitable pattern to ensure the maintenance of Aboriginal cultural practices and connections with the rivers (Behrendt and Thompson 2003)

Cultural Flow

- Another definition offered by a MDLRIN delegate from the Yorta Yorta nation, Professor Henry Atkinson, reports on the MLDRIN definition:
Cultural Flows' are water entitlements that are legally and beneficially owned by the Indigenous Nations of a sufficient and adequate quantity and quality to improve the spiritual, cultural, environmental, social and economic conditions of those Indigenous Nations (Atkinson 2009)
- Definitions and needs for water by Aboriginal people may differ at a local scale
- A representative definition is yet to be agreed on by the 250+ Aboriginal Nations within Australia

Gaps in Knowledge

- No research is yet to quantify a cultural flow i.e. no credible evidence
- No research has compared a cultural flow to an environmental flow
- There is a severe lack of quantitative data on Aboriginal water uses and values of Water:
 - So a need for further primary data collection or case specific investigations (Long Term)
- There are substantial gaps in science of identifying Aboriginal water requirements – Culturally and Economically

CSIRO

- CSIRO investing in Aboriginal water management through the Water for a Healthy Country Flagship:
 - Work to date in Northern Australia
 - CSIRO Indigenous Engagement Strategy
 - *CSIRO Indigenous Employment Strategy*, aiming to increase Indigenous employment to 2.5%
 - CSIRO three National Indigenous Roundtables on:
 - Indigenous Research, 2008 in Broome
 - Water and Climate Change, 2008 in Mildura
 - Health, 2009 in Adelaide
 - Employment of Brad Moggridge
- CSIRO has a strong interest in developing long term research activity to address Aboriginal water requirements

Wrap Up

- Aboriginal people have a long and deep relationship with water which has evolved to allow survival today through accessing Cultural Knowledge
- Aboriginal people have opportunities to engage in water through the NWI and UN Declaration, but jurisdictions need to allow this to occur
- There is a growing body of interest in a 'Cultural Flow'
- There are considerable gaps in knowledge in understanding how water is used by Aboriginal people both economically and culturally and what benefits Traditional Knowledge can provide Western Science
- While I am at CSIRO I will be keeping this issue on the lab bench

Australia with NO Cultural Water



Australia with Cultural Water





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THANKYOU

and

QUESTIONS

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