

Stakeholder perceptions of water reform in two catchments in Queensland Australia

Baldwin, C* and Ross H**

* PhD Candidate, School of Natural and Rural Systems Management, The University of Queensland; CRC Irrigation Futures; Lecturer, University of Sunshine Coast

**Professor, School of Natural and Rural Systems Management, The University of Queensland



Water Reform in Australia

National Water Initiative

- the return of all currently over-allocated or overused systems to environmentally-sustainable levels of extraction
- to use community partnerships to promote transparency, and
- to ensure information is available for users to 'increase public acceptance'.

Queensland's two stage water planning process

- **Water Resource Plan (WRP)** determines water availability and establishes water allocations – intended to reverse where practicable degradation that has occurred in natural ecosystems
- **Resource Operation Plan (ROP)**, based on outcomes of the WRP-specifies individual entitlements

Conflict resolution

Physical stress on resources and rapid institutional change increases likelihood of conflict (Wolf et al 2002)

Little likelihood of reaching mutually satisfactory outcomes without understanding values, interests and concerns (Cornelius. 1998, Suskind 1999)

Purpose of Study

- To identify stakeholder values and interests in water allocation in two case study areas in Queensland
- To build this into decision process in order to resolve conflict.

Case study areas



Case Studies

- Stress on water resources primarily from agricultural development;
- Institutional challenges as a result of water resource planning and evolving local stakeholder groups; and
- A history of conflict about water.

Lockyer – ‘The Magic Pudding’

- Increasing reliance on groundwater
- Declining underground water levels in alluvial aquifers
- Connectivity between surface and underground water -minimal stream flow; minimal aquifer recharge
- Affecting water quality
- Reduced crop production
- Draft MWRP released July 2006
- LWUF- irrigator rep

Stages

1. Eliciting values – photovoice: 33 interviews of irrigators, gov’t, landcare
2. Reconciling differences – workshops and focus groups – focus on gov’t and irrigator



Environmental values- irrigators

- Discomfort with environmental sustainability
- Water efficiency and wasting water
- ‘Triple bottom line’ – social, economic, and environmental re sustainable water use
- ‘Sound regional economy that would support a stable community’

Environmental values- non-irrigators

- balance of production and environmental needs
- the challenge of meeting environmental requirements

Threat to sustainable water use

- Both irrigators and non-irrigators:
- overuse or mismanagement of water
 - climate and lack of rainfall

Irrigators - water reforms and government regulation (CL and LL)

Public and private interest

Meaning of water - irrigators and non-irrigators identified public and private interests

Irrigators:

- livelihood and family life
- providing a secure source of food for the national and regional community

Non-irrigators:

- balance between environment and consumption for economic development
- amenity and quality of life.



'A good crop means livelihood, prosperity'

'Local employment'

'Future generations on the land enjoying the lifestyle of a farming family' (Irrigators)



'Water provides quality of life'

'Supports my lifestyle' (Non-irrigators)

Another indicator of public interest

Upstream users have an obligation to those downstream?

Majority of both irrigators and non-irrigators agreed – less in Upper Lockyer



Response to regulation

- All sectors: necessary to put a cap on amount of water taken and have allocations based on sustainable yield.
- Irrigators responses reflected basic human needs for economic well-being, control over one's life, sense of belonging – concern about economic consequences of reduced allocation
- Alternative concept of 'co-management'



'If government puts too many restrictions on us they won't have a farmer left'.

'The biggest worry ... is somebody coming in and trying to control... who won't know our business plan or our cropping or irrigation regime'

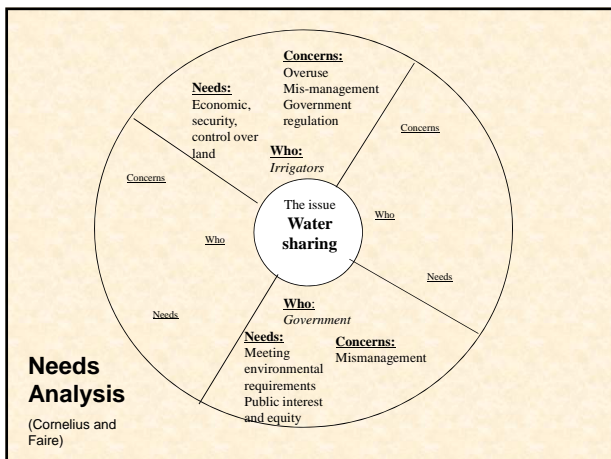


Co-management

- Gov't allocates to management areas
- Management area groups determine allocations within the area
- Meters owned and monitored by LWUF; with independent auditor
- Data base of levels and extraction for better water management

Mutual gain decision-making

- Separate interests from positions
- Understand needs and address concerns which can become barriers
- Broadens scope of options



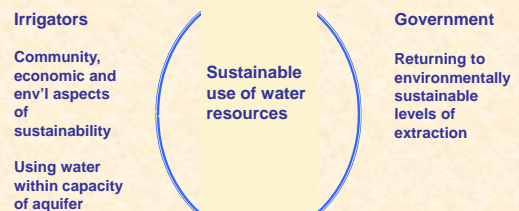
Techniques for resolving differences

- exploration and sharing of each parties' perspectives and in so doing finding common ground
- acknowledging the others' values and interests by 'standing in the others' shoes
- joint problem-solving
- objective criteria for assessing options
- reframing statements in a more positive light.

Common Ground

- Focus on 'shared space' of area of potential agreement
- Understanding each parties' needs

Environment



Regulation - Meters

Irrigators

Meters are essential to understand how the aquifer works, essential for crop production

Meters therefore need to be owned and maintained by irrigators

Meters to be installed on all active bores, with independent auditing and compliance

Government

Meters are essential for compliance

Meters therefore need to be owned and maintained by government

Regulation by Co-management

Irrigators

Strong sense of community and commitment to region

Accustomed to having control over business decisions and lifestyle

Co-management over whole of Lockyer

Agreement on co-management in at least part of the Lockyer

Government staff

Strong commitment to government agenda

Accustomed to having little say on decisions made

Co-management only in Upper Lockyer

Lower Balonne

'You can't flog a dead horse'

- Stream flow reduced; event based manag't
- Less beneficial flooding of downstream grazing lands; minimal stock and domestic flow; reduced wetting of Narran wetlands.
- WRP completed in 2004; ROP - mid 2005-draft to be released Sept 2006
- MWRAC appointed; boycott by those downstream

Values and interests

- 34 photovoice interviews - 11 irrigators, 8 graziers, 9 State and Local Government and 6 others (Aboriginal people, landcare, and environment).
- included most appointed to MWRAC + previously involved in the Community Reference Group for WRP process.



'Lignum country: normally wouldn't see 50 m beyond the road for the bush ... Dying trees have a psychological effect...'

'You also miss out on a lot of money...I've been trying to retire for a year ... It's a bit hard to flog a dead horse' (graziers)

- Downstream graziers' perception of not being listened to during WRP process
- Requested certain changes to MWRAC process
- Concerns not addressed so boycotted MWRAC
- Conflict escalated
- Credible process?

Lockyer

Conflict resolution techniques integrated in decision-making has contributed to:

- reduction in tension
- joint problem-solving approach seeking innovative solutions to meet both parties' needs

Lower Balonne

Lack of basic conflict resolution techniques led to:

- escalation of conflict
- further breakdown in relationships

Conclusion

Appropriate use of conflict resolution techniques can add value to a planning or consultative process

