

# COMMUNITY WATER FORUM AGRICULTURAL REGION

## SUMMARY OF OUTCOMES

MERREDIN, WESTERN AUSTRALIA  
26 JULY 2002



Office of  
Water Regulation



Water and Rivers  
Commission



## EXECUTIVE SUMMARY

### Context

A Community Water Forum involving 50 participants was held at Merredin on 26 July 2002.

The focus of the forum was:

*“the development of sustainable rural water supplies for the agricultural region”.*

The objectives of the forum were:

- provide an opportunity for stakeholders to exchange views and ideas and to network with colleagues and associates who have an interest in rural water matters;
- provide delegates with an opportunity to contribute to a statement of key issues relating to rural water; and
- provide delegates with an opportunity to contribute to a summary document of the recommendations for addressing rural water issues to be taken to the Premier’s Water Symposium.

In the morning sessions, guest speakers provided briefings on a broad range of water topics.

In the afternoon sessions, participants generated and prioritised:

- the key issues;
- the ways forward; and
- general recommendations to the Water Symposium.

## Key Issues

Participants developed and prioritised the following issues:

	<u>Votes</u>
<b>Need for an integrated water management strategy at the regional level.</b>	
• At the regional level, develop an integrated water management strategy.	25
• Poor integration between all parties on broad scale water planning, eg: Government departments and community.	11
• Promote community water developments with multiple outcomes and identifiable environmental and community benefits.	2
• Identification and integration of government programs (State funding) into Natural Resource Management programs to maximise effort; capture of Federal funds (eg: NAP and NHT <sub>2</sub> ).	2
• Greater co-operation between relevant Agencies and communities.	1
• Lack of long-term planning.	
• Need a strategic regional vision.	
• Integrating all supplies to be used.	
<i>Issue Total:</i>	41

## Saline water resources are undeveloped.

• Greater use of local sources of water, ie: desalination of groundwater.	13
• The Wheatbelt has massive groundwater resources which could be modified for domestic supply, agriculture and new industries (could we use nuclear power in desalination?).	5

• Find ways to use excess saline water (currently an undeveloped water resource).	2
• Local desalination; is it economical?; will it work? Community needs more information.	1
• How to utilise brackish and saline water in the region (desalination) in an economic manner.	
• How can we change massive volumes of saline water to advantage(s)?	
• Looking for synergy between new sources and the need to remove and treat poor quality water from rural land.	
<i>Issue Total:</i>	21

**The true cost of water is not reflected in the price of water.**

• Identify the true cost of providing water at the point of consumption, taking into account the extra costs of providing for dry years.	10
• ‘True’ cost of water supply development and operation needs to be transparent and options need to be compared on a total-cost basis.	7
• Water is too cheap – the price doesn’t show the true cost of water.	1
• Price signals – are they correct? True costs need to be made known.	1
• Real cost of water needs to be considered (a user pays system). General public needs more education on the real cost.	
• Water pricing to achieve a change in water use.	
• How far should Demand Management go if true cost is paid?	
<i>Issue Total:</i>	19

**Pipeline access discourages on-farm storage and supply**

- Need to provide an incentive for landholders on the Comprehensive Water Scheme to improve farm water supplies and reduce Comprehensive Water Scheme use, ie: access to grant schemes. 8
- Re-instate existing water supplies rather than relying on pipelines (town water supplies and on-farm supplies). 5
- Where pipeline extensions are provided, there is a reduction in the investment in on-farm storage and supply. 3
- Incentives to reduce demand on pipeline supplies (“no rates for no use”). 2
- Farms linked to the Comprehensive Water Scheme tend not to put money into on-farm water supplies (dams, tanks, etc) and this needs to be rectified.
- Encourage incentives (tax and grants) for on-farm water supply development in medium and “higher” rainfall areas on the Comprehensive Water Scheme, to make additional water available to drier areas.
- No incentive to develop and use local water resources or potential resources (eg: granite outcrops); or re-use water when Scheme water is available.

*Issue Total:* 

---

 18

**Lack of support for water planning and technical expertise at the farm level.**

- Lack of water planning support, particularly at the local and wheatbelt level. 12
- The rural community believes that the technical expertise to assist and drive on-farm improvements is being withdrawn from the field (Department of Agriculture needs to have more technical resources in the field). 3
- Technical expertise and information is not getting ‘on the ground’ (to final users).

*Issue Total:* 

---

 15



**Need for education and communication about water supply and use.**

- Lack of understanding of the problems and “The Big Picture” at the personal and community level. There is an urgent need for education and better communication about all aspects of water supply and use. 10
  - Lack of education and awareness of water scarcity and water management. 2
  - Local ownership of water supply encourages responsible management, responsible use and new ideas. 2
- Issue Total:* 14

**Need to adapt water management to climate changes.**

- Have we recognised the likely impacts of climate change? (need to put more thought into this). 6
  - Need better adaptive management processes. 4
  - Need to adapt catchments, dams, methods and knowledge to match the changing climate. 3
  - Climatic change: coming to terms with reduced run-off and increased evaporation; educate people of this probability; change attitudes to the value of water.
  - Climate change – drought.
  - Need to preserve water to match our climate.
- Issue Total:* 13

**Not enough effort being put into re-use of water.**

- Re-use of storm water, grey water and effluent, recognising environmental restraints, (varying in degree between water saving and environmental restraints). 8
- Focus on strategies for re-use and strategies to overcome major infrastructure constraints (country can teach the city something). 2
- Disposal issues – where to?; how measured?; what impacts? Connect to re-use options. 1
- More efficient use of water (recycling and re-use).
- Not using our water resources properly, eg: re-use.
- Not using “up-to-date” technology and planning, eg: wastewater re-use.
- We discard water too early – re-use it more than once or twice.
- Needs to be much greater effort put into recycling water – grey water, etc.
- Regulatory and policy frameworks regarding water re-use; do they need to change?
- Water re-use (saline and grey water).
- Reduce the demand for high quality water.
- Need to tackle waste in both the urban and rural environment (better use of water and resources).
- “Grey water should not be retired”.

*Issue Total:* 11

**Not enough known about the sustainability of groundwater resources.**

- Sustainability – how does our annual use compare to new water availability annually?; what are the trends? New uses for Gngangara?; better land use planning?; monitoring?; adequacy? Inadequate resources for protecting existing and future water sources. 4
  - What guarantee is there that future water supply options are permanent? 3
  - Effect of extraction of groundwater on vegetation and environment. Do we know? 1
  - How sustainable is groundwater abstraction on Gngangara Mound? 1
- Issue Total:* 

---

 8

**Need for alternative economic uses of the landscape.**

- Develop better economic usage of the landscape and develop new opportunities. 5
  - The focus of farming in Western Australia is too narrow; cereals and livestock are very dependent on large amounts of quality water; we need greater diversity! 2
  - Lack of adequate supplies of good quality water are limiting opportunities for community and industry expansion and the introduction and development of new industries. 1
  - Need for water in new agricultural and industrial developments, eg: oil mallee processing, vineyards, feedlots, feed processing. 1
- Issue Total:* 

---

 8

**Focus on short term, reactive responses.**

- The current focus will diminish when the current crisis is over. There is a need for a sustained effort to promote efficient use of the water resource. 8
- Issue Total:* 8

**Need for integrated water budgets.**

- Water budget – every Community needs one. 3
  - Need to better integrate full water cycle issues across environment, urban consumption, agriculture, recreation, etc. 3
  - Plans for water conservation and consumption. 1
  - Integrating water management (surface; groundwater; sewage; environmental uses; economic uses). 1
- Issue Total:* 7

**Changes to the Farm Water Grant Scheme.**

- Financial assistance to “drought proof” farms should be on a property basis not an individual or relationship basis. 5
  - Current limit on Farm Water Grant Scheme does not appropriately reflect the increasing size of individual properties. 1
- Issue Total:* 6

**Not enough lateral thinking in the development of solutions.**

- Not enough lateral thinking on incorporating new ideas; drainage to remove water; farm water needs; and leadership to integrate solutions. 4
- Not enough effort being made to look for broader benefits in developing solutions to particular problems.
- Need to examine the option of transferring abundant water from the Kimberley region to the south west of the State.
- Water supply and management needs to look at all of the options.

*Issue Total:* 4

**Need for more research.**

- Lack of water research, eg: methods for reducing reservoir evaporation. 4
- No comprehensive geophysical mapping of the south west region is available to show landholders their local water (and groundwater) resources.
- Salinity in townsites - is excessive water use (gardens and household) a consideration, as water input is concentrated locally?

*Issue Total:* 4

**Population changes and quality of life issues.**

- Need to plan for population increases and be realistic! Water is a limiting factor. 3
  - Loss of rural population means increasing maintenance cost, and increasing cost of water and effluent treatment for rural schemes. 1
  - Maintain quality of life comparative to city and urban expectations (would also address rural population decline?).
- Issue Total:* 

---

 4

**Lack of funding for research and support.**

- Lack of funding for research into rural water supplies, catchments and salinity on-farm. 1
  - Balancing available funds so that the development of technical input and capacity ‘matches’ the level of funding on the ground.
- Issue Total:* 

---

 1

**Need to use better practices on ground.**

- Follow up maintenance and observation of bores and facilities put in place by Local Government authorities. 1
  - Development of better water conservation practices at both on-farm and community scale.
  - Lack of local water harvesting.
  - Water supply dams – shortage at the farm and at the regional level.
  - Evaporation loss from open storage reduces the water left for use.
  - Using better risk assessment techniques.
  - “Groundwater should not surface”.
- Issue Total:* 

---

 1

### Health concerns.

- Is our Scheme water really fit for human consumption? Reportedly, it has 67 additives.
- Quality of many rural domestic supplies are questionable. Relationship with long term health?

### Other issues.

- Policies on water licensing are creating problems.
- What is the appropriate scale for water service provision?
- Water Corporation concept of supply versus Premier's plea for conservation.

## Ways Forward

Participants developed and prioritised the following ways forward:

	<u>Votes</u>
<b>The use of incentives to change water use behaviour.</b>	
• An incentive scheme for landowners on the Comprehensive Water Scheme to develop on-farm water supplies.	14
• Positive incentives for changing attitudes to water use, eg: tax incentives for rainwater tanks.	11
• Incentives for full participation in region and community initiatives.	5
• Tax deductibility as an incentive for on-farm gathering and storage, regardless of access to the Comprehensive Water Scheme.	2
• Incentive schemes, eg: for water conservation, desalination, innovation, etc.	1
• Strategy to recognise excellence in local water re-use (recycling) – Triple Bottom Line Award (social, economic and environment).	1
• Encourage farms to maximise on-farm water (including no water main rates if not used); harness on-farm before looking off-farm.	
• Domestic and residential incentives to conserve water, eg: free native plants; use of rainwater tanks; subsidised consultancies for garden designs; use of grey water.	
<i>Issue Total:</i>	34

**A long term, bi-partisan approach is needed**

• Long term policy that transcends consecutive Governments, involving a bi-partisan solution.	20
• Realign the priorities of water use management for a 25 (50?) year plan to incorporate State, Local and Commonwealth funding and bodies.	6
• Mechanism to maintain continuation of water management (and funding) through successive governments (levy on water consumption).	2
• Somehow or other, we need to divorce water from politics. The supply of water should not depend on votes or politicians retaining their seat.	2
<i>Issue Total:</i>	30

**Development of a clear framework to integrate all approaches.**

• Clear framework, focusing on water issues within the State Natural Resource Management framework.	15
• At a regional level, develop a strategic plan, using the existing Natural Resource Management bodies, targets and visions. Identify the real costs (social, economic and environmental) in the wheatbelt communities.	7
• Strategy to enhance networks and contacts and the integration of programs to achieve multiple outcomes (more triple bottom line).	3
• Make the real cost of options available to help informed decisions, planning and whole of State decisions (government policy).	1
• Agencies and experts must share knowledge to develop regional strategies to make best use of the available water.	
• Community and Agency commitment to effective decision making at a regional level.	

- Need to develop a replacement plan for existing infrastructure, eg: pipes, pumping stations.
- Develop management plans to handle increasing water demand in the future.

*Issue Total:* 

---

 26

**Creation of a structure that integrates and manages water responsibilities.**

- Establish a regional water management body. 11
- Government person (Water Resources Minister?) who is responsible for co-ordination of Agencies with water management responsibilities (Water Corporation, DEWCP, Department of Agriculture). 10
- Integration is needed as the mandates of individual Agencies often conspire to deliver a sub-optimal outcome for the State as a whole (triple bottom line accounting). 3
- Get Government agencies to work together (Federal, State and Local) through the formation of a peak body that is well resourced and make those involved accountable. 2
- Management body to: investigate projected future usage; identify and quantify sources; identify opportunities and associated industries; and ensure viable supply.

*Issue Total:* 

---

 26

**Provide major funding for water initiatives.**

- \$100 million per annum to make initiatives happen. 10
- Commit a greater portion of the State Government budget to water resources and supply. Water is a major issue and needs major funding. 4



- Establish priorities within the water budget, ie: with the actual funding.
- Public and private commitment to the resources (funds) that are needed.
- Recognition of State based programs in regional programs to maximise Federal money (NHT<sub>2</sub> and NAP).

*Issue Total:* 14

**Better use of existing water supplies.**

- Better utilisation of natural and “human” catchments in rural areas (eg: granite outcrops, wheat bins, paved roads, etc). 4
- Use saline water for thermal power; desalination(?); aquaculture potential (large-scale commercial). 4
- We need to have a serious look at how we use the water we already have (households, farmers, Local Government, State Government, etc). 2
- Town parks and gardens to monitor water use with tensometers to minimise use of water for irrigation. 2
- Townsite collection of stormwater for use on parks and garden. 1
- Our future needs to be based on known resources and techniques rather than those unproven. Although we need new ideas and innovation, we should not base our future on the “might happen”.
- Lack of access to information on new and available technologies.
- Educate and provide incentives to use and upgrade local water supplies.

*Issue Total:* 13

### Increase technical advice and water planning support at the farm level.

- Technical advice and monitoring on the ground for efficient water use and maintenance programs for the water infrastructure. 9
- Re-instating extension services (true behavioural change has to be guided through face to face contact). 2
- Develop programs and educational opportunities to improve locally available technical input (planning before implementation). 1
- Provide advice and assistance to improve run-off into dams (eg: change catchment) and reduce evaporation, due to climate change.
- Provide information pack and on-site advice to farmers on: water balances; harnessing and storage of water; and water efficiency.

*Issue Total:* 

---

 12

### Provide better education and awareness about water use.

- Encourage a shift away from reliance on public water supplied to urban and rural: educate on the use of harvesting and storage options and re-use; bolster on-farm water initiatives (FWGS); get people off Scheme water; conservation measures (dual flush toilets, shower heads); storm water use. 5
- Education on the finite nature of water resources; source costs; and treatment costs. 2
- Develop information (freely available) such as costs of facilities, services and programs to enable trade-offs and better use of incentives. 2
- Strategy to improve conduits for education and exchange of information. 1
- Education needs to be both urban and rural. 1

*Issue Total:* 

---

 11

**Recognise the social impacts of water supply.**

- Decentralisation; turn around the rural decline. Need population in rural areas to stimulate local development, to utilise local resources (water), and to spread the burden of cost. 8
  - Equality of access to water in terms of price; quantity; city and rural. 2
- Issue Total:* 

---

 10

**Strengthen the Government community partnership.**

- Community management and ownership to maximise opportunities and provide effective management of constraints. 4
  - Share information on successes and failures, water management, options and water use requirements through community (eg: Local Authorities) to individuals. 3
  - Government sponsorship and encouragement for community based innovation. 1
  - Government and community partnership.
- Issue Total:* 

---

 8

**Encourage innovation in responses.**

- Look beyond our State boundaries to see what others are doing, interstate and overseas; we may not have to “re-invent the wheel”. 7
  - Salt tolerant agriculture. 1
  - Investigate viable desalination options – on-farm, groups, regional, salt power generators.
  - To handle climate change, focus on crops and systems that use less water.
- Issue Total:* 

---

 8



**Encourage more research.**

- Complete geotechnical survey to quantify water quality and quantity. 4
- We need to take into account that environmental concerns (eg: salinity) are part of the equation. In this, we need accurate and reliable data; too much guess work to date?
- Understanding of the availability of water resources and management of future options.
- Full investigation of groundwater resources and identified sites for test bores.
- Investigate ancient drainage channels for natural drainage of saline groundwater.

*Issue Total:* 

---

 4

**Raise the price of water.**

- Increase water charges more steeply, after a set water allowance. 2
- Review water pricing, in order to increase positive incentives and increase price. 2
- In regard to pricing, the issue of resource charges needs to be addressed, ie: private supply versus public supply.
- Pricing policy – more severe charges for high end users.

*Issue Total:* 

---

 4

**Changes to the Farm Water Grant Scheme.**

- More flexibility in the Farm Water Grants Scheme. Needs review? Perhaps all farmers should be eligible if this means improved water supply and improved water conservation and management. 4

*Issue Total:* 

---

 4

## General Recommendations

The Community Water Forum reached consensus on the following recommendations:

- That the “key issues” identified reflect the priorities to be addressed.
- That the “ways forward” identified reflect the initiatives to be examined.
- That there is a need for a high level committee and commitment, answerable to the Premier:
  - to tie all approaches together under a resource management umbrella;
  - to provide a driving force for action; and
  - to be bi-partisan in approach.
- That there must be follow-up and outcomes from the Premier’s Water Symposium.
- That regional level investigation and action be formulated for both supply and drainage issues.
- That the community is prepared to accept responsibility and control for water issues, at the local level.
- That there is recognition of the connections and integration of water supply and management between the Wheatbelt, Mundaring storage, Gingin groundwater and irrigation schemes.
- That there is an urgent and immediate need to address the continuation of funding for the Farm Water Grant Scheme, given:
  - 75% of farmers are unable to access the Comprehensive Water Scheme; and
  - there has been no water run-off in certain areas since 1999.
- That there is a need to manage risks to rural water supplies, based on the best knowledge of resource trends.

- That re-use of water principles and water conservation ethics from rural areas can be applied to urban areas.
- That planning and communication are paramount in the resolution of the current situation.

The recommendations reflect a balance between the need for long term planning and the requirements for short term action in certain agricultural areas.

## Full Report

A full report of the Community Water Forum is available.