



DFID Engineering KaR Programme 2002: Proposal W1-17

September 2006: Vol. 3 Issue 3



Second Order Water Scarcity in Southern Africa

Welcome to our second newsletter of 2006!¹ This newsletter is designed to be of interest to people concerned about access to and conflict over water resources in Southern Africa. It is being distributed bi-monthly until the end of the project cycle, May 2007. Previous newsletters are available at www.waterscarcity.org.

This issue presents finding briefs from two South African case studies, Mseleni in Northern KwaZulu Natal and Grabouw in the Western Cape. Combined, these two case studies represent over 10 weeks of field research and over 100 interviews with a wide range of actors from community members to municipal representatives, private sector to technicians. Interviews aimed to solicit a broad spectrum of views on how and on what scale water resources should be managed, towards what uses and facilitated by what kind of technologies. Interviews were followed up with a series of focus groups, report back sessions and end-user mapping workshops, through which communities were invited to feed directly into the research process and to begin to shape findings towards their own needs.

Results are in the process of being synthesized into maps representing both the range and distribution of views present in the two very different kinds of communities. The aim is to create visual policy dialogue tools of use to community members and groups and policy makers when seeking to find consensus around technological and management packages for water and sanitation in complex social environments.

Future directions to be reported on in our next biennial newsletter include the inception of the eThekwin case study, the publication and distribution of study results to key stakeholders across South Africa.

We thank everyone who submitted comments and suggestions in response to our last newsletter and continue to welcome your very important insights.

Sincerely,

Zoë Wilson, Lead Researcher, Second Order Water Scarcity in Southern Africa, South Africa Team

¹ If you are on this list it is because you or somebody you know has suggested that you may be interested in the results of this project and/or you have been a direct participant in the project. To suggest further interested parties please email wilsonz@ukzn.ac.za. To unsubscribe to this list please email with the word 'unsubscribe' in the subject line.

Preliminary results from Mseleni and the surrounding areas:

Case Study researcher Eleanor Hazell was provided with community liaison support from Phiwokhule Msanse, Thulile Thembe and Sipho Zuma.² Field research took place over five weeks and included over 60 interviews with community members and small scale water users, through business and larger formal water users, to key decision makers. Research also included 10 focus groups, report-back and end-user mapping sessions.

It was found that the *hydropolitical situation* in Mseleni involves a complex of actors with contending views and competing water needs spanning the public/private, formal/informal and modern/traditional divides. Uses include: drinking, domestic, food/crops, cattle, small scale businesses, larger formal businesses in the nearby town of Mbazwana, Mseleni Hospital, commercial and community plantations, tourism and the environment. Actors in the water situation include:

community members, small scale business owners and employees, people who sell water formally and informally, community garden coordinators, local water committee members, traditional authorities such as the indunas and inkosi, the ward councillor, municipal managers, engineers, technicians, project managers, community health workers, community development workers, traditional religious figures such as the sangomas, Christian pastors, teachers, doctors, environmentalists, plantation owners, a commercial forestry company, ESKOM, and DWAF decision makers.



Access and availability depends on a high groundwater table, seasonal rainfall, small rivers, water delivered by municipal tanker and piped, treated water delivered to households and communities surrounding Mseleni hospital by a leaky³ reticulation network and via a larger water scheme to homes, businesses and a saw mill in Mbazwana.

Lake Sibaya - a protected reserve and part of Greater St Lucia Wetland Authority, a World Heritage Site – is the source of piped water for Mseleni & Mbazwana. . Interviews

revealed that many people used a wide variety of water sources in the day-to-day, not all of which were seen to be suitable for municipal management.

Preliminary analysis of interview material revealed 13 types or ideal mental models used by different actors to represent and legitimize their preferred technological and management packages (or conversely, to explain the lack thereof). Analysis further revealed that the standard debates could be usefully placed on a simple four quadrant grid to illustrate the key issues upon which politics tended to pivot: water as commodity/water as gift from God and water as scarce/abundant. Intermediate positions on the grid include a wide range of issues from support for water recycling and rain water harvesting to support for large agro-business and inter-basin transfers.

Overall, on-going synthesis of interview material is helping to render a highly complex social context in visual terms in order to be of quick reference use to policy makers, donors and non-governmental organization and community groups working to create meaningful dialogue around management models and technological options.

² Overall project management: Julie Trottier; lead researcher for South Africa: Zoë Wilson

³ A local Water Engineer estimated water losses of up to 70% through leaks (interview, 2006).

Preliminary results from Grabouw:

Key objectives of the overall project are to develop a rapid hydropolitical assessment tool, including the means to develop locally appropriate visual policy tools of use for empowering local communities to intervene more effectively in policy and planning. The case study researcher for this case was Karen Peters, with interpretation and community liaison support from Marcelino Jonas.



In order to create these visual tools both cases relied on various data collection methods that could be progressively compared. For example, transect walks oriented researchers and provided the basis for the preliminary 'situational' maps – maps representing all the actors and elements that bear upon 'the situation' (see previous newsletter). These walks helped to identify various unconventional stakeholders that needed to be included in the hydropolitical mapping process.

They also served to build knowledge about the relationships between socio-political, geographical and infrastructural landscapes. This included situating Grabouw as a fruit growing region within the Hottentots Holland Mountains and the N2 national highway – both of which create immobile boundaries around Grabouw constraining further urban land development and intensifying land pressured. Walks also included key institutional land marks such as the water reticulation plant (shown above looming over an informal settlement) and sewage treatment plant, revealing implicated elements such as occasional river contamination, an issue raised again during focus groups.

Preliminary analysis suggests the project's emphasis on mapping an array of actors, elements and issues not normally considered in water research lead to a fuller understanding of the interplay between social, cultural, political, economic, geographical and institutional bearing on hydropolitics in Grabouw and the surrounding farm area.

Research also had the following objectives in mind – to find a visual way to help communities navigate unfamiliar patterns and landscapes, anticipate/verify their position in the hydropolitical constellation, and strategise around future goals. The end-user mapping has also shown early promise as a tool for empowerment.



Research revealed that the end-user mapping process, with targeted support, could be useful for communities towards clarifying the various relationships at play. Communities reported that having a clearer representation of the water situation and how the various actors and elements fit together in relation to their own goals and challenges was beneficial. Similarly, the Grabouw Water User Association felt that the resultant maps would be a key tool for initiating their members into the range of different experiences and interests surrounding the shared water resource. The Grabouw case study, again, demonstrated the complex nature of communities and further challenged the idea that communities are unitary, capacitated and equitable.

CALL FOR PAPERS
IN THE PIPELINE: NEW DIRECTIONS IN CULTURAL RESEARCH ON WATER
SYMPOSIUM — 15-16 JUNE, 2007
Abstracts — 18 October, 2006

With drought and climate instability putting pressure on current and future water supplies, there have been many calls for change in Australia's **water use cultures**. Yet almost all Australian research on water users has investigated the attitudes and socio-demographic characteristics of **individuals**, not cultures, usually with a view to predicting or changing individual behaviour. Meanwhile, unknown numbers of researchers around Australia are working on projects investigating water and water-related issues from a cultural perspective, and/or with strong concerns for cultural dimensions of water practices, ownership, technologies, uses and values. These researchers can be found in government and non-government organisations, and across a variety of academic centres and departments, ranging from media, communication and cultural studies; history, anthropology and sociology; through to departments of rural studies and geography or geo-spatial studies; as well as in engineering, hydrology and earth sciences. Many of them are postgraduates and early career researchers keen to make contact with others.

The **IN THE PIPELINE SYMPOSIUM** will bring together for the first time these dispersed researchers in a unique interdisciplinary gathering. Convened by the Centre for Cultural Research (with additional support so far from the ARC Cultural Research Network), the Symposium will be held at the Parramatta Campus of the University of Western Sydney on Friday June 15 and Saturday June 16, 2007.

The Symposium aims to explore such questions as:

- *Who's doing what in cultural research on water in Australia?*
- *What is convergent and divergent in approach, theory, method, research design?*
- *What kinds of networks and partnerships are being developed?*
- *What can be done to promote more cultural research on water?*
- *How might cultural research and culturally-oriented strategies effectively contribute to water sustainability?*

This **CALL FOR PAPERS** invites abstracts of 100-200 words for 20-minute papers or 10-minute panel presentations outlining recent or current projects, and/or identifying methodological, theoretical or practical issues. **Deadline for submission of Abstracts is Wednesday October 18, 2006 via email to Dr Zoë Sofoulis, z.sofoulis@uws.edu.au.** To assist with timetabling, organisers reserve the right to offer proposers either a 20 minute paper or a 10 minute panel slot.

FEES T.B.A. Efforts will be made to keep them affordable for ECRs. Please indicate the likelihood of receiving institutional support for your travel and attendance.

LEAD-UP EVENT AND ORGANISING COMMITTEE

Also sought are expressions of interest in attending a small-scale preliminary networking/workshop event in early December at the CCR. Offers of assistance in organising the Symposium are welcome. Please email with contact details and interests to Zoë Sofoulis.

