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The Impact of Government Funding Mechanisms on Urban Community Participation in Natural Resource Management in Perth, Western Australia: A Case Study

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# The Impact of Government Funding Mechanisms on Urban Community Participation in Natural Resource Management in Perth, Western Australia: A Case Study

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Abstract: Australia has a fragile natural environment which has been radically altered over the past 200 years by land clearing for agriculture and urban development. It has become very urgent that measures are put in place to halt this degradation and in recent years federal and state governments have put in place various policies and funding mechanisms to encourage communities and landholders to take some responsibility for rehabilitating their natural environment. These policies and mechanisms are in a state of constant and ongoing change and this paper examines the effect of these changes on a local community based catchment group in Perth, Western Australia.

Keywords: Natural Resource Management, Community Participation, Governance, Funding Mechanisms, Volunteer, Social Sustainability, Environment

#### Introduction

HE SWAN RIVER in Perth, Western Australia has the reputation of being one of the cleanest rivers running through a major city in the world. However, seasonal algal blooms and toxic chemical spills have, on many occasions, alerted policymakers and citizens to the fact that the river was not as pristine as it appeared. In the 1990s, the public were encouraged by state government agencies to form catchment and friends groups and to carry out revegetation projects, monitor water quality, flora and fauna and work to control weeds in the various river catchments. Some groups operate on a semi informal basis as small 'friends groups' while others are more formalised 'catchment groups' with a membership of volunteers, government agency and local government representatives. These community groups have had access to funding under various state and federal government schemes to carry out their projects and in some cases, to employ coordinators. However, the current structure of 'natural resource management' (NRM) in Western Australia is underpinned by what Pannell et al (2004) refer to as "a complex and not-well-integrated set of acts". These include the Conservation and Land Management Act 1984; the Agriculture Protection Board Act 1950; the Soil and Land Conservation Act 1945 and the Waters and Rivers Commission Act 1995. The management of the catchments in Western Australia is characterised by complex and inter-dependent relationships between state and federal government agencies, quasi government organisations and community volunteer groups (Pannell et al, 2004). Funding of their various activities is subject to ongoing policy changes, both state and federal, as the emphasis has changed from funding community involvement to a more economically rational model of engaging professional organisations to deliver larger regeneration projects on a regional basis.

In this article, I will briefly outline the changing NRM funding strategies and examine their effect on a community based catchment group in metropolitan Perth. The study was carried out through a series of interviews and document analysis over a period of four years.

### Government

Australia's environment and biodiversity has suffered often irreparable damage from European farming methods, especially from the large scale clearing of native bush which has occurred over the past 200 years of colonisation. Salinity, wind and water erosion, misuse of fertilisers and consequent degradation of fragile and infertile soils have flow on effects on local biodiversity and water quality. The scale of this damage is beyond the capability of governments alone to regulate, finance and rehabilitate and, thus, in the late 1980s, the commonwealth<sup>1</sup> government promulgated the 'Decade of Landcare' as a means of encouraging landowners and groups of interested volunteers to care for their local environment, both in the city and the bush. Under the Australian consti-

<sup>&</sup>lt;sup>1</sup> Australia has a federal system of government, comprising of states and territories with responsibility for local administration and the overarching national government with responsibilities for national and foreign affairs etc. In this paper I use the words 'federal' and 'commonwealth' interchangeably to refer to the national government.



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tution, caring for the environment is a state government responsibility (Hodgman, 2004). However, the Commonwealth government's decision to control "large programs of supplementary funding for NRM" subverted the role of the state to some degree (Pannell 2004). By retaining this control and through choosing to distribute these funds via regional Catchment Councils, the Commonwealth has effectively created another level of bureaucracy. Catchment Councils in Western Australia consist of community members and government agency representatives and they have become the dissemination point for NRM funding and to some extent the decisionmakers about how funding is disbursed. State government and its agencies play an advisory role in the decision making processes of the catchment councils, which are funded by the federal Natural Heritage Trust, but at the same time, have to separately maintain their responsibility for caring for the state's natural resources such as regional parks, waters and rivers.

Initial funding was available to community groups to carry out local environmental regeneration projects through state based funding models such as the Swan Canning Clean-up Program (SCUUP) and the federal Natural Heritage Trust Envirofund (part of what is known as NHT1). This approach has had some success, particularly in rural areas where Landcare groups have a more pressing vested interest in protecting their local environment and their future livelihoods. However, it has been less successful in urban areas and the ad hoc manner in which projects were chosen, the effectiveness of funded projects, inadequate reporting and ultimately lack of professional support has lead to groups being forced to reevaluate their activities (see for exampleSmith. T.F. et al., 2005).

Educated and active communities form a crucial pillar of sustainability and, in addition, can and do contribute to the development and implementation of state and federal government policies either as actors or through public submissions processes (Paulin, 2006). From reading various Australian government environmental strategies and reports, it is clear that government has identified 'the community' as an indispensable workforce for putting government and agency plans into practice on the ground (see for example 'Together, Let's Give Our Land a Hand' (2004)). Funnell (1998) has pointed out that:

Government use of communities has become increasingly recognised as a legitimate and potentially more effective and efficient means of designing and delivering services and other government initiatives. Use of communities has been part of a re-orientation from the welfare state to the primacy of self help, a change in the role of government from rowing to steering and a move to smaller and leaner government.

However, NRM policy documents and policy makers are not clear about who 'the community' actually are and how they will carry out the role of environmental caretakers. The term 'community' has many diverse definitions depending on who is using it and in what context. Bruhn suggests that "community can only usually be described, not defined, and experienced, not generalised" (Bruhn, 2005, p16) and that according to Wrong (1976) " the achievement of community ... cannot come from pursuing it directly, but only as a by-product of the shared pursuit of more tangible goals and activities" (cited inBruhn, 2005, p17). Reflecting Wrong's definition of community as an intangible by-product, some small urban Friend's Groups have developed around a shared interest in maintaining the local bushland or waterway and have become, over time, social networks or 'communities' within small and locally defined geographical boundaries (O'Byrne, 2006). Robert Bellah et al (1985) defined a community as "a group of people who are socially interdependent, who participate together in discussion and decisionmaking, and who share certain practices that both define the community and are nurtured by it" (p333). Thus, while individuals may have an interest in caring for the environment, sustainable community involvement in NRM must also encompass social and economic vitality as well as caring for the environment, as

Discovery and engagement are intrinsic social activities. However, if that discovery and engagement are not widely present within a local area, action related to improving ecosystem health, while at the same time dealing with issues of social equity and economic vitality, is unlikely to be sustainable. ... Participatory development and natural resource management need much more specificity than simply a call for natural resources policy and management that is community-based (Butler Flora et al., 2000).

The practice of isolating particular processes from the wider contextual arena of community development is counterproductive and I take up the premise that:

the process of protecting and managing natural water resources is necessarily linked to building, strengthening, and expanding the definition of community – and as such that watershed management must be related to community development and empowerment more broadly defined

(Shaxson (1999) cited in Butler Flora et al., 2000).

In the context of what government means when they talk about community, one interview respondent said:

When government departments talk about the community ...I think they think of the community as being volunteers and I don't think, when they talk about community capacity, they talk about the capacity of the volunteers to undertake environmental work (2004).

From my research, it is clear that, as suggested above, simply identifying 'community' and 'volunteers' in policy documents and strategies as the desired implementers of NRM does not mean that such 'communities' exist on the broad scale required for the scale of implementation that is envisaged by the government. Capacity building programmes and support structures need to be responsive and tailored to cater for the various groups who are interested in taking on this regeneration task; with the recognition that supporting these communities to become strong and cohesive will engender respect and reciprocity and foster ownership of the need to care for the environment (Wilkinson & Bittman, 2002).

### The Catchment Council

There are six NRM regions in Western Australia governed by Catchment Councils: Swan, South West, South Coast, Avon, Northern Agricultural and the Rangelands. The Swan Catchment Council (SCC) comprises a chief executive and a committee of 'community' members representing various sub regions, local governments and government agencies. The SCC is supported by the Swan Catchment Centre and has responsibility for NRM in the Greater Perth metropolitan area. It covers 7000 sq kms, with a population of 1.25 million people and 40 local authorities who have "developed an outdoor lifestyle that is heavily reliant on the high quality environmental values and assets in the Region" (Swan Catchment Council, 2002, p9).

The SCC produced '*The Swan Region - a Natural Resource Management Strategy*' (the Strategy) in 2002 to address their priorities at that time. The Strategy's objectives included conserving natural diversity, ensuring adequate water quantity and quality, improving land condition, improving management processes and achieving cultural change (Swan Catchment Council, 2002). The reported outcomes of the strategy would provide "a mechanism for meaningful community input into the operation of current policy and statutes. It also provides mechanisms for an empowered community to inform any review of policy and statutes, particularly as they relate to planning and natural resource management" (Swan Catchment Council, 2002, p1).

The Strategy stated that community based activity in the Swan Region was high with some 250 groups and up to 10,000 people actively involved in protecting the environment and recognised that "the direct involvement of the community in natural resource management represents a voluntary investment of time and skills valued at millions of dollars. Their contribution is vital for achieving the Strategy's goals" (Swan Catchment Council, 2002, p20). However, early on, the strategy recognised that these groups would have to become more self sustaining and could not depend long term on ad hoc NHT funding or the state based SCUUP. The community, it suggested, would have to generate long term funds from private investment in order to fund their conservation activities and to employ the Coordinators or Regional Support Officers who worked with them. I would suggest that the success of such strategic fundraising would be highly dependent on the strength of leadership and vision and time commitment of the individual groups.

The strategy listed active community involvement in a large range of tasks including:

- educating and motivating the wider community, industry and government about natural resource management issues and how all people and sectors can contribute;
- preparation of strategic and action plans for specific areas in association with state and local government;
- monitoring of trends in the condition of vegetation, water bodies and fauna;
- direct on-ground management of bushland, wetlands, streams and riparian areas through 'Friends' groups;
- volunteer support to government research programs;
- attracting investment into natural resource management at local levels;
- negotiation of and management of projects with local and State government authorities and agencies;
- making direct representations to local and State governments and agencies, and
- Involvement, as key stakeholders, in preparation of Commonwealth, State and local strategic plans and action plans (Swan Catchment Council, 2002, p20)

Consequently, the strategy recognised that without volunteers, the bulk of environmental remediation would be impossible:

Put simply, government would not be able to provide this level of resourcing if this voluntary contribution of time, skills and knowledge was withdrawn. At the same time, there is evidence that community and voluntary 'burn out' is beginning to affect some groups and activities (Swan Catchment Council, 2002, p94).

In response to the deemed inefficiency of the ad hoc funding regime of NHT1, the strategies outlined in the NHT2 funding policy documents released in May 2001, were the result of extensive public consultation to ascertain community perceptions and to ensure that critiques of the previous policy with regard to lack of 'on-ground' work were addressed (Wonder, 1999). Under the NHT2 criteria, regional Catchment Councils were required to seek accreditation by drawing up new strategies and policies under the guiding themes of "Rivercare, Coastcare, Bushcare and Landcare" (Australian Government, 2002, p4). This accreditation process was very time consuming and imposed heavy workloads on the regional bodies. They were diverted from the planning and implementation of effective 'on ground' work and the active support of local community groups for up to a year by the need to fulfil new strategic investment and planning requirements under the NHT2 funding round in 2004-5 (Whittington, 2005). Although this process is of value in terms of trying to ensure more strategic and better focussed funding allocations and whole of catchment planning, the process has also resulted in a rationalisation and reorganisation of expert support staff and a loss of their community 'memory'. In some regions across Australia,

there appears to be confusion about regional planning, mixed with many instances of disempowerment and disillusionment. In some regions, plans have been drawn up but the implementation phase is confusing, complex and problematic. In other regions, plans do not exist, despite acknowledgement that they are needed (Mack & Stephens, nd).

Participants at a recent NRM seminar (2007) heard that while 57 regions had accredited NRM plans, only 7 regions were putting them into action. There was recognition that government NRM policies had become over complex and there was a need to return to basics with a focus on identifying desired outcomes and working backwards to define necessary actions to achieve them. There is also a renewed emphasis on the need to incorporate social and economic considerations into the NRM planning logic (Rowley, 2007)

Under the NHT2 arrangements, the Catchment Council has become a more centralised organisation, drawing back programmes from its sub-regions and putting projects out to tender by larger professional environmental groups such as Greening Australia and the World Wildlife Fund. The 'local community' has been sidelined in favour of working with specific communities, such as 'small business owners' (Swan Catchment Council, 2004). Combined with changed state government funding priorities, this has left the community based catchment groups with no direct ongoing professional support. This direction may be as a result of the difficulty of engendering broad scale active engagement in environmental issues in local communities or an economically rational solution to the need for greater transparency, evaluation and reporting and 'being seen to be doing something', or a combination of both. However, I would argue that without grass roots activities which, properly supported, designed and implemented, could have the potential to engender some individual responsibility for caring for the environment, this policy runs the risk of encouraging the continuation of the 'its up to the government to deal with it' response from the wider community.

While the Swan Catchment Council has handled the accreditation process reasonably efficiently, confusion about funding for sub-regional staff, gaps in communication and future organisational shape have widened the gap between the conservation bureaucracy and the volunteer catchment groups. *The Swan Region – a Natural Resource Management Strategy* (2002) was concerned with the need to support the community and grow volunteer groups. In contrast, the *Swan Region Strategy for Natural Resource Management* (2004), written to comply with the accreditation process required under NHT2, is a much more strategic and rational document. The 2004 Strategy lists as an objective:

Increasing public knowledge and awareness will lead the wider regional community to increase its appreciation of natural resource assets. In the long-term this will lead to support for the allocation of resources for the protection and sustainable management of those assets (Swan Catchment Council, 2004, p135).

The 2004 Strategy goes on to detail:

the role of catchment groups is to provide leadership on NRM matters at a sub-regional level. They will coordinate on ground action and community involvement in setting regional targets that contribute to national, State and regional outrcomes within their catchment. They will coordinate development of catchment plans, strategies and actions to achieve agreed targets. They will play a role in coordinating community involvement in monitoring the progress towards agreed targets (Swan Catchment Council, 2004, p171) Note the reference to "effective, efficient and "cheap" implementation of on-ground works through volunteer labour" under Economic values.

In keeping with the above, the following table details the local community as a regional capacity asset.

Table 1: Regional capacity asset values: local community (Swan Catchment Council, 2004, Table 15, p136).

Environmental	Economic	Social
• Implementation of on-ground activities compensating for the	· · ·	• Enables a sense of ownership and belonging to community, a sense of
lack of will and/or commitment	through volunteer labour.	place and of diversity, sense of pride.
elsewhere. • Application of local knowledge	<ul><li>Free advice</li><li>Create employment and business op-</li></ul>	• As a group, there is potential for greater lobbying power.
and skills.		Provides forums for the development
<b>2</b>	11	of social networks and friendships,
standing and appreciation of the environment due to personal in-		mental and physical well being. Provides opportunities for personal
terest and close proximity to is-		development
sues		<ul><li>Builds a community.</li><li>Builds community aesthetics</li></ul>
		•Bunds community aesthetics

Community catchment groups and volunteers are identified as assets (and in some places as a liability due to burn out) and their role described as supporting the Catchment Council to achieve its agreed targets. However, in practice, it is evident that the rationalisation of the Swan Catchment Council's priorities, under the NHT2 criteria, and the state governments' redesigned funding programs have resulted in detrimental outcomes for community based catchment groups.

The following case study illustrates how the Swan Regional Strategies have affected one community based catchment group.

# **The Community Group**

The Belmont Vic Park Catchment Group was formed in April 1998 by community members interested in the local environment and in response to urging from the Urban Bushland Council. The group identified a number of local issues which they were interested in following up; these included sources of industrial pollution, management of the horse racing stables effluent, water quality monitoring and conserving and re-establishing flora and fauna.

The group executive developed relationships with state agencies. The two local governments (LGA's) were represented by councillors who attended catchment group meetings. The group was largely independent and devised their own programme including regular water monitoring of local drains, which fed into the Swan River, and revegetation projects in the local vicinity. They received some support from the Swan Catchment Centre in the form of organisational and technical advice and, in 1998, group representatives took part in decisionmaking processes in the state government funding initiative known as the Swan Catchment Urban Landcare Program (SCULP).

The SCULP program, a partnership of the Swan River Trust, the Swan Canning Cleanup Program and Alcoa (\$1.24 million over five years) encouraged community groups to design joint projects with state and local governments, however, "a community group must be seen to be the driving force behind and the managers of the project" (Hart, 1998). These funds could not be used to pay salaries, apart from paying consultants or contractors for a particular task which the group or partner LGA could not do themselves, for example, clearing tracks with bulldozers, weed spraying or conducting a professional bird and fauna survey.

The group held monthly meetings with a speaker and attracted a regular attendance of up to 25 people, with more volunteering for planting days and other activities. Members were reimbursed for group expenses up to \$3,000 pa by the Swan Catchment Council.

In 1998, funding was also available through the NHT1 Envirofund for "projects that are partnerships between community groups and local councils or state government agencies ...NHT is emphasising the importance of the combined approach in managing the environment" (P.Hart, Swan Working Group, 14 October 1998)The guidelines also stated that "projects must be aimed at achieving results on the ground".

In 1999, the catchment group was encouraged to apply for funding from the Swan Canning Cleanup Programme to employ a coordinator as their region covered several priority catchments with major drains feeding into the river that required regular monitoring and rehabilitation.

There was pressure for a coordinator and we were going to get given money for that, so we applied and I think we got \$87000 – it just jumped from \$3000 to \$87000, so what started off to be a problem of we haven't got money therefore we can't do anything turned into so much money and a coordinator, but with that we had to find the skills for a treasurer and then we were pulled out of doing that to interview for a coordinator... all of this wasn't why any of us were there – it was all added drama! (Catchment group member, 2006).

With the employment of a coordinator in 2000, the group had to form a management committee and were responsible for paying wages and taxes, including the new Goods and Services Tax. Personnel changes, both the voluntary officeholders and the coordinator, brought changes to the dynamics of the group. The treasurer along with another long term committee member retired from their executive positions to follow their local environmental interests. This marked the changing point between the group being actively run by the community members to increased reliance on the paid coordinator to set agendas, organise activities and apply for funding – from being leaders in their local environment to being organised.

As part of the state government's rationalisation of the SCUUP program, some catchment groups were encouraged to amalgamate. This made sense from an economic standpoint as funding for coordinators and project officers was rationalised and communication lines were shortened. However, group members were not totally convinced and reserved the right to withdraw if they wished. In amalgamating with the Canning Plains Catchment Group to form the Two Rivers Catchment Group (TRCG), there were now five local councils represented, boundaries were substantially larger and the group was encouraged to take up the opportunity of permanent office space at the sub-regional office, some distance away from the centre of the original community. The coordinator became part of the sub-regional organisation by default and all catchment group meetings held at one local government location (rather than the original arrangement of sharing meetings between the two founding local governments).

Sub-regional officers and catchment group coordinators mentioned fears about their limited ability to provide adequate assistance to volunteer groups when their geographic area of responsibility was spread so wide (various catchment group respondents, 2005). They saw a danger in the increased bureaucracy and the current regime of short term contract funding tied to particular projects.

...there is a level which has been missed out and that is the level of action at the moment and what I mean by that is that we have got all these bureaucratic type jobs, regional jobs, but if ultimately the work doesn't get done on the ground, then the behaviour doesn't change and the environment won't change and the water quality won't change so we will still have a crappy river (Sub-regional officer, 2004).

In 2004, changes in state government policy about how best to address environmental management with limited funding resulted in the cutting of catchment group coordinator positions and coordinators were encouraged to apply for a reduced number of specialist roles in the sub-regional offices. Others left the organisation and took with them important community networking knowledge. The specialists retained nominal links with the catchment groups but, in effect, they developed programmes within their speciality, which were run in the catchment, which group members were invited to take part in and which could be funded through monies held by the catchment groups. Funding applications were still reliant on notional community involvement. The TRCG committee continued to meet but became a forum for exchanging information between LGA, agency and sub regional officers, rather than a vibrant and active community group.

In 2005, in the absence of a community volunteer, a sub-regional officer took on the role of Chairman. They had ready access to the environmental agency network and continued to organise regeneration projects in the group's name, but, in the main, the 'planting force' was provided by Community Volun-teers Australia<sup>2</sup>. In fact, there is a difficult balancing act between designing projects that are useful and will achieve good environmental results and projects that have to cater for what the 'community group' likes to do. This is even more difficult when the community group has become disengaged and fractured. Thus, although projects were badged as TRCG 'community group' projects, they were in effect organised with little active input from the catchment group committee and members (sub-regional officer, 2006).

<sup>&</sup>lt;sup>2</sup> "Conservation Volunteers Australia (CVA) is a national, not for profit, non-political community organisation. CVA's Mission is to attract and manage a force of volunteers in practical conservation projects for the betterment of the Australian environment. (http://www.gotoaco.com/act/group/Conservation\_Volunteers\_Australia.html, June 2007)

It is apparent that a 'community' chairperson would not have similar access or the time commitment to organise projects on as large a scale. The chairmanship has now reverted to a community member (2006) and communication channels are once again reliant on community representatives relaying information from higher level meetings and the commitment that this entails. With the committee roles once again in community hands, they have to restore the passion that was evident back in 1998 when the catchment group first formed.

### Conclusion

Given the government's stated aim of encouraging community awareness and willingness to take responsibility for local NRM, it is evident that community based catchment and environmental groups will need to form part of the matrix. The ongoing changes to the funding and organisational processes over the period 1998-2006 have significantly affected the dynamics of community based catchment groups and in some cases caused their demise. It is vital that policy makers and practitioners respect and acknowledge input by community groups in the NRM process and that in creating and maintaining lines of communication and organizational networks, they recognize the special dynamics of working with and supporting voluntary community groups. If these groups are to flourish once more as part of the environmental regeneration network, some thought will have to be given to ways in which they can be supported as active contributors in building a sense of place in their local community. While some community groups are committed to protecting their local environment with limited resources, it is not practicable to expect such groups to carry on in the long term without ongoing support from environmental professionals and more stability in the policy development process. As the respondent above exclaimed, it is easy to make policy sitting in an office in Canberra and quite another to put it into practice on the ground.

## References

- Australian Government, (2002) protecting>conserving>repairing: National Action Plan for Salinity and Water Quality, National Heritage Trust. Canberra,
- Australian Government (2004) 'Together, Let's give our Land a Hand'. Canberra.
- Australian Government. (2002). protecting>conserving>repairing, National Action Plan for Salinity and Water Quality. Natural HeritageTrust.
- Bellah, R. N., Madsen, R., Sullivan, W. M., Swidler, A., & Tipton, S. M. (1985). *Habits of the Heart:Individualism and Commitment in American Life*. Berkeley: University of California Press.
- Bruhn, J. G. (2005). The Sociology of Community Connections. New York: Springer Science+Business Media, Inc.
- Butler Flora, C., Gasteyer, S., Femandez-Baca, E., Baneji, D., Bastian, S., & Aleman, S. (2000). Local Participation in Research and Extension for Conservation and Development of Natural Resources: A summary of approaches. Paper presented at the Sixteenth Meeting of the International Farming Systems Association, Santiago, Chile.
- Funnell, S. (1998). Building the capacity of communities as partners with government, challenges for a small and lean government. Canberra: Department of Finance and Administration
- Hart, P. (1998). Expression of Interest, Swan Catchment Urban Landcare Program. In The Swan Catchment Urban Landcare Program Steering Committee (Ed.). Perth, Western Australia.
- Hodgman, K. (2004). The biodiverse city: the challenge for law and governance. *Local Government Law Journal*, 9(123), 123-141.
- Mack, V., & Stephens, M. (nd). Final Report: Building Regional Capacity: Natural Resource Management Short Course. Canberra: Natural Heritage Trust. Australian Government.
- O'Byrne, M. (2006). Friends: Environmental Friends' Groups. In S. Paulin (Ed.), *Community Voices: Creating Sustainable Spaces* (pp. pp138-150). Perth: UWA Press.
- Paulin, S. (Ed.). (2006). Community Voices: Creating Sustainable Spaces. Perth, Western Australia: UWA Press.
- Rowley, T. (2007). Monitoring, Evaluation, Reporting and Program Development (MERI), *Social and Academic Information in NRM Forum in Western Australia*. Esplanade Hotel, Fremantle: Notes from presentation.
- Smith. T.F., Darbas, T., Hall, C., Bellamy, J., Fisher, J., Gambley, C., et al. (2005, August 2005). Development of a Typology of Engagement in Natural Resource Management for the Western Catchments of South East Queensland. Paper presented at the International Conference on Engaging Communities, Brisbane.
- Swan Catchment Council. (2002). The Swan Region a Natural Resource Management Strategy April 2002. Perth, Western Australia.
- Swan Catchment Council. (2004). *The Swan Region Strategy for Natural Resource Management. Draft for public comment.* Perth, Western Australia.
- Whittington, B. (2005). Personal communication. Bakers Hill, WA.
- Wilkinson, J., & Bittman, M. (2002). *Volunteering: The Human Face of Democracy*. Sydney: The Social Policy Research Centre, University of New South Wales.
- Wonder, B. C. (1999). Steering Committee Report on Public Responses to Managing Natural Resources in Rural Australia for a Sustainable Future: A discussion paper for developing a national policy. National Natural Resource Manage-

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Wrong, D. H. (1976). Skeptical sociology. New York: Columbia University Press.

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