

**Stakeholders, natural resource management and Australian rural local governments: A Q-methodological study**

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### **Abstract**

This paper reports on a Q-methodological study of stakeholder perceptions of rural local government management of natural resources. Data analysis of the Q-sorts revealed that there are five distinct stakeholder perspectives relating to rural local government and environmental management. In terms of environmental sustainability at the local level rural stakeholders perceive local government as an unwilling participant, an inconsequential participant, as a problematic participant, as a potential participant, and most positively, a participatory partner. The paper describes each of these five stakeholder perspectives in detail before examining the implications of these findings for greater environmental sustainability at the local level in non-metropolitan Australia.

## **Introduction**

It seems almost customary to begin a scholarly paper on local government in Australia lamenting the lack of literature on the subject (e.g. Dollery and Marshall, 1997; Mowbray, 1999; Dollery, Marshall and Worthington, 2003). It is thus not surprising that academic work pertaining specifically to local government management of the environment is particularly scant. In large part the work that has been undertaken has typically focused on two inter-related thematic questions. That is, the extent to which local governments in Australia are environmentally engaged and the constraints to local government environmental management (e.g. Keen and Mercer, 1993; Keen, Mercer and Woodfull, 1994; Crowley, 1998; Bulkeley, 2000; Mercer and Jotkowitz, 2000; Adams and Hine, 1999; Wild River, 2003). Collectively, this literature has demonstrated that, with few exceptions, there has been little environmental progress at the local level in Australia. This, it has been argued, is a result of a number of barriers including a shortage of finances, a lack of staff expertise and detailed local level environmental data, a lack of state and federal government support, the limited legislative power of local government, and the traditional and conservative nature of local government.

In more recent literature a new theme has emerged in the literature on local government management of the sustainability in Australia. This literature examines local environmental stakeholders. To date, it has examined a wide range of issues including the role of volunteers in local environmental management (Gooch, 2004), strategies for engaging youth in natural resource management at the local level (Lane et al, 2005), the degree to which different types of stakeholder groups are included in local sustainability efforts (Broderick, 2005) and the different environmental views of local stakeholder groups (Winter, 2005). This paper is a contribution to this literature in that it draws on Q-methodology data to examine stakeholder opinions about Australian rural local government management of natural resources. Q-methodology, an approach first developed by psychologist and physicist William Stephenson (1953) in the 1930s has been found to be particularly useful in public policy studies as the method illuminates key discourses that exist on a subject (Webler et al, 2003; Woolley and McGinnis, 2000).

The paper proceeds as follows. It begins by providing some contextual information on local government in Australia that demonstrates the significance of the study. Following this is a discussion of Q-methodology. The subsequent five parts of the paper report on the data. In Q-methodology individuals who rank statements in a similar manner are said to 'make up a factor' (Maxwell, 2000: 341). In this study five distinct factors or profiles were identified. Each of these factors represents different stakeholder experiences of natural resource management and rural local government. After a discussion of the key features of each profile the concluding discussion draws attention to the implications of the findings for local sustainability agendas in rural Australia.

## **Background**

Australia is a federal system with three tiers of government: commonwealth, state and local. The more than 700 councils that constitute those in the 'third tier' of local government vary significantly in terms of their geographic size, financial capacity and population. There is, for example the largest, the Brisbane City Council with its population of 1.6 million and annual revenue of \$A1425 million. To the west of it however, are such sparsely populated and poorly resourced shires as Aramac with its population of 700 and budget of just \$A7 million.

The diversity among local governments in Australia is complicated by the fact that they also differ along state lines as local government roles and boundaries are determined by state government legislation. In this sense there is a 'dependence of local government on state government' (Binning and Young, 1999: 22). Until recently state governments allocated a fairly narrow and traditional range of tasks to local government. However, during the period 1989 and 1995 all state acts pertaining to local government were reviewed and the roles of the sector were dramatically expanded (Aulich, 1999). Today Australian local governments are responsible for a broad range of roles including public works, community services, public order and safety, health and welfare, housing and community services, cultural, sporting and recreational facilities and environmental issues. In terms of an environmental portfolio local governments undertake roles relating to biodiversity and native ecosystems, conservation parks and open spaces, weed and feral animal controls, the maintenance of transport corridors ,energy and water supply and heritage matters (see Wild River, 2003).

In seeking to fulfil their environmental responsibilities local governments has been encouraged by various parties to involve stakeholders (Cuthill, 1998). In part, this has been informed by the legislative reforms of the 1990s which focused on increased civic participation in local government to counter the impact of amalgamations (McKenna, 1995 ; Marshall, Witherby and Dollery, 1999). The mantra for stakeholder involvement in natural resource management has also been driven by research work that has demonstrated the inter-relationship between local sustainability and community participation (Tuxworth, 1996; Selman and Parker, 1997; Parker and Selman, 1999; Wild and Marshall, 1999).

Other literature has highlighted that it is not just community stakeholders who need involvement in local environmental efforts, but also stakeholders from other tiers of government. Writers have pointed to the fact that local governments in Australia have limited capacity to raise revenue and therefore cannot work on environmental issues alone (Wild River,2003 ). This is particularly so for resource-poor local governments (Tonts, 2005 ). Other writers have highlighted the fact that the natural resource policy arena in Australia is a complex, changing and fragmented one operating at multiple levels and across numerous sites (Morrison, McDonald and Lane, 2004; Buhrs and Aplin, 1999: 322). The arena has become particularly complicated in recent years as new regional natural resource management organisations have been established in a number of states (Jennings and Moore, 2000; Paton, Curtis, McDonald and Woods, 2004).

## **Q-Methodology**

The first of the attractions of Q-methodology is its focus on the subjective experiences of participants, its emphasis on context, and its privileging of the everyday and local (Brown, 1980). What is of interest to Q-methodology researchers is how actors come to know and make meaning and sense of their worlds from their own perspectives and experiences. This rejection of 'a priori assumption' about what items may mean or what a group of items may mean is distinctly different from approaches that seek to fit the experiences of participants into pre-determined categories (Gallivan, 1994: 33).

Q-methodology can be explained as encompassing four key stages. The first stage involves the identification of the particular 'discourse' that is under investigation as well as the dimensions of that discourse. In Q-methodology a discourse refers to a set of shared beliefs, opinions, understandings or meanings that is held by a population. In this study the discourse under examination was attitudes and perspectives surrounding rural local government and natural

resource management. Each dimension of a Q-method discourse is known as a concourse. In developing a concourse researchers may use either ready-made or naturalistic texts. Both approaches were used in this study. A range of statements were drawn from policy documents and research reports on the subject. Other statements were selected from interviews with 93 local government officials and elected members who were located in 15 different rural local governments across the states of New South Wales, Victoria, Queensland and Western Australia.

The second stage in the Q methodology process is to develop a statement set or Q-sample from the concourse. Usually the concourse will be ‘around three times the size of the aimed-for Q set, say 200 for an aimed-for Q-set of 65’ so this is quite an arduous process (Stainton Rogers, 1991: 185). The size of the statement set will vary, but typically it is between 30 and 60 statements (Thomas and Watson, 2002:142). In this study the statement set was 56. A structured approach guided matrix development and selection of statements (McKeown and Thomas, 1988). This sampling strategy was grounded in an inductive design, which emerged from the patterns observed as statements were collected; that is, during interview analysis and identification of dominant themes discussed by interviewees. This involved drawing statements from the interviews around the four themes of engagement outlined below (Table 3.1). Statements were then selected so as provide a description of each of these themes as possible facilitators or barriers to local government implementation of natural resource management (see Appendix 4). Thus the researchers structured the items in the Q-sample conforming to the conditions (as noted in Table 1). Each ‘engagement factor’ (Community, Capacity, Connection, Commitment) was produced along two dimensions (Facilitators and Barriers) creating eight possible combinations. Statements were assigned to each combination based on the researchers’ definition of the category. To enable a variety of experiences to be expressed, each combination was then replicated seven times as suggested by McKeown and Thomas (1988), producing a statement sample of 56 items.

Table 1 Structure Sample Justification

Main effects	Levels	N
A. Engagement factors	(a) Community (b) Capacity (c) Connection (d) Commitment	4
B. Dimensions	(e) Facilitators (f) Barriers	2
Q-sample = (N) = (Main Effects) (Replications) = ([A] [B]) (m) (A) (B) = (4) (2) = 8 combinations Replications (m) = 7 <u>N</u> = (8) (7) = 56 statements		

The third stage after the development of the Q-sample is asking participants to order the statements in a process that is called a Q-sort. Statements were written on small cards and sorted into piles in a quasi-normal distribution according to instructions described by the researcher. In this study the instructions were ‘What is your experience of rural local governments and natural resource management?’ Participants were asked to nominate statements according to the following: most like my experience (+5) or most unlike my experience (-5) (See Figure 1 Q-sort distribution).

Figure 1

Q-sort distribution

	Most unlike my experience						Most like my experience				
Value	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
Frequency	2	3	4	5	6	16	6	5	4	3	2

Because Q-methodology emphasises individual subjectivity, traditional positivist sampling techniques, which focus on the need to generalise from the studied population using large sample sizes, are not relevant (Brown, 1996). The process is much more akin to the purposeful or strategic sampling characteristic of qualitative research (Mason 2002). In this study the participant set was structured using the following two characteristics. First, the different types of stakeholder organisations involved in local government and natural resource management<sup>1</sup> and second, the different states under investigation (Table 2). Applying McKeown and Thompson’s (1998) formula resulted in the recruitment of 28 participants for q-sorting. Whilst variations in sample size occur in q-methodological studies, small samples are typical. Thus, the sample size for this study is consistent with that recommended in the literature.

**Table 2–Set Structure of Structure of Stakeholder Groups**

Main Effects*	Levels	N
A: Stakeholder organisations	(a) Producer groups: agri-political organisations, irrigator groups (b) Business groups: chambers of commerce (c) Conservation groups: Landcare <sup>2</sup> (d) Voluntary, recreational and sporting groups: fishing organisations, horse riding groups, camping and bush walking groups, social service groups (e) Research and Development Organisations (f) Regional natural resource management organisations, State government agencies	7
B: Geographic location	(a) Western Australia (b) Queensland (c) Victoria (d) New South Wales	4
N=(A)(B) = 28		

From this sample, the five factors were defined by the following Q-sorters:

<sup>1</sup> One important stakeholder group not included in the study was the Commonwealth Government. This is because the relationship between the Commonwealth and local governments in Australia in terms of environmental management was being investigated by another project being undertaken at the same time (Wild River).

<sup>2</sup> Landcare....(Curtis and Lockwood)

- Factor A: (7, 9, 10, 21, 23).
- Factor B: (1, 3, 11, 12, 16, 25)
- Factor C: (5, 8, 24, 28)
- Factor D: (2, 15, 26, 27).
- Factor E: (17, 19, 20).

The final stage in Q-methodology study is data analysis. Data were factor-analysed in order to identify patterns across individuals. This is distinguishable from the traditional survey R methodology, which is concerned with determining patterns across variables.<sup>3</sup> 'Like minded' individuals who 'load' on the same factor have sorted the statement items similarly and consequently will be those who have a similar discursive position. Others who load negatively on the same factor hold diametric points of view on the issue (Addams, 2000). To assist with data analysis the Q-methodology package PQMethod was utilised. A five factor solution was judged by the researchers to represent the subjectivity of people's experiences of dealing with natural resource management. This is explained further in the following section.

### **Five factor solution**

The 28 Q-sort responses were entered into the PCQ software package (Stricklin and Almeida, 2002), which intercorrelates all Q-sorts and informs the profiles or factors generated. Variance was calculated by the PCQ software at 5.71. In Q-method, variance is not an arbitrary setting, rather it is a function of the number of items and the number of piles in the Q-sort study (Stricklin & Almeida, 2002). As recommended by leading Q-researcher, Stephen Brown (1980: 223), solutions were run with more factors (nine-factor solution) than was expected to be significant. This process assists in interpretation because the researchers continually posit possible explanations for the factor arrays until the best explanation has been developed for the factors generated.

A five-factor solution was selected based on ease of interpretation and description of the natural resource management discourses, with 22 sorts out the 28 aligned significantly<sup>4</sup> (i.e. factor loading  $\pm .34$ ) with the five factor solution. This approach follows the 0.3 'rule of thumb' used in typical factor analysis. Q-factor solutions however are not determined by statistical criteria alone. Brown (1980: 42) argues that the contextual setting to which the factor(s) are organically connected is equally important. Thus the selection of the Q-factor solution used a combination of statistical significance and contextual interpretation to finalise selection of the five-factor solution. Table 3 reports the factor loadings for all 28 Q-sorters.

Table 3 also illustrates that, in addition to the five participants with significant loadings on Factor A, six had significant loadings on Factor B, four loaded significantly on Factor C and different four participants loaded significantly on Factor D and three participants had pure loadings on Factor E. The table also reveals that four participants (6, 13, 18, 22) had significant loadings on more than one factor; that is, these people represented two or more factor profiles. The remaining two participants (4, 14) did not have a significant loading on any of the factors, indicating that the Q-sorts provided by these participants were distinctive and unrelated to the established natural resource management profiles.

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<sup>3</sup> There is significant debate about the differences between Q and R methodologies in the literature (see Durning 1999: 404-405; Robbins and Krueger 2000: 640). There is also considerable argument as to whether such a comparison is even necessary or justified.

<sup>4</sup> Factor loadings are deemed significant in Q-methodology if they exceed  $\pm 2.58 (1/\text{SQRT}(N))$ , where N is the number of statements in the Q sample. In the current study  $N=56$ , which produced  $.34$  criterion)

The communalities ( $h^2$ ), reported in Table 3 indicates the percentage of commonality of the Q-sort responses with the five factors defined by people's experience of natural resource management and rural local government. Therefore, the  $h^2$  values for sorters 4 and 14 are low. Specifically, these people had least in common with the other 26 people that defined the five 'idealised' natural resource management discourses, which represented distinct patterns of response and discourse about natural resource management. Also revealed during PCQ analysis are those statement items that have similar scores across all factors, and thus point to areas of consensus and agreement amongst the factor profiles. These consensus items add to the understanding of natural resource management experiences. PCQ software<sup>5</sup> identified one consensus items in the three factor solution (see Table 4). This item is likely to have emerged as one on which all participants agree because the issue of the limited political power of local government may be seen as a statement of 'fact'. This is also an issue that resonates strongly in the literature on Australian local government (see, for example, Mercer and Jotkowitz, 2000; Adams and Hine, 1999; Wild River 2003; 2005a; 2005b).

**Table 3 Significant Q-sorters**

Q-Sorter	Factor A	Factor B	Factor C	Factor D	Factor E	H2
1	.19	-.49*	.05	-.17	-.15	.33
2	.16	.04	-.01	.64*	.05	.45
3	.10	.46*	.15	.15	-.14	.30
4	.18	-.06	.10	-.24	.07	.11
5	.29	-.09	.40*	.09	.06	.27
6	0	-.15	.09	.37*	-.49*	.42
7	.62*	.08	.06	.01	.01	.40
8	.02	-.01	.68*	-.04	-.49	.53
9	.36*	.17	.07	0	.01	.18
10	.57*	-.11	.14	.18	-.26	.48
11	-.18	-.59*	.15	.07	-.10	.43
12	.08	-.40*	.15	.15	-.29	.23
13	.22	-.39*	.32	.42*	-.13	.50
14	0	-.09	.32	.28	.12	.20
15	.14	0	.22	.39*	-.08	.27
16	.18	.58*	.01	-.10	-.09	.39
17	-.18	-.12	.10	-.03	-.22	.26
18	.45*	.57*	.12	-.07	.01	.56
19	.23	.17	-.04	.02	-.45*	.72

<sup>5</sup> PCQ compares each item across all factors in the study and declares a consensus if the scores are in contiguous piles or not separated by more than one pile (Stricklin, 2004, email communication).

20	.29	.17	-.09	-.04	-.01	.59
21	.58*	-.25	-.18	.13	-.79*	.46
22	.59*	.14	-.10	.50*	-.67*	.64
23	.46*	.11	.11	.22	-.10	.29
24	.34*	.05	.50*	.18	0	.40
25	.10	-.44*	.17	-.26	.02	.33
26	.09	-.29	.18	.42*	-.02	.30
27	.16	.04	-.01	.64*	.05	.45
28	-.11	-.05	.65*	-.10	.11	.46

\*Denote a loading significant at .34

**Table 4 Consensus Statement**

Factors	A	B	C	D	E
Statement: An enormous barrier to local government environmental policy formulation in Australia is the lack of effective political power of local government.	1	0	0	0	1

There were 22 stakeholders who had statistically significant loadings on one of these five factors. In reporting on Q-sorts researchers typically label each factor as a simplified means of capturing the essence of the discourses that make up the results (Dryzek, 1994). This strategy is also used below in the discussion of five different stakeholder perspectives on rural local government and NRM.

**Profile A: Local government as unwilling to be involved in natural resource management**

Profile A loaded highest on four items which collectively position rural local governments as isolationist and traditionalist. That is, they disagreed most strongly with the two statements that ‘shires are becoming more used to working co-operatively on projects for planning’ (-5), and ‘rural local governments have moved from a siege mentality to a proactive agenda in relation to NRM’ (-5). Similarly, they agreed most with the statements that ‘rural local government is conservative and developmentalist in orientation and dealing with the environment is still seen as radical’ (+5), and ‘councils are more familiar with engineering works, with the more traditional sets of tangible costs and benefits and the costs of environmental loss, ecosystem degradation and species decline do not feature within such traditional frameworks’ (+5).

Profile A’s strong perception of rural local governments as disconnected is also evidenced by their selection of statements that were identified as being strongly unlike their experience. These were ‘councils work closely with catchment councils and incorporate their goals into the council environment plans’ (-4), ‘shire environment plans incorporate principles from the regional catchment authorities and state legislation’ (-4), and ‘local governments have a strong record on community consultation in relation to NRM as they are the closest tier of government to the people’ (-4).

It is important to highlight that there was a degree of homogeneity in those Q-sorters who loaded most strongly on Profile A. That is, all belong to government agencies working with rural local governments on natural resource management. Three of them are involved in regional groups as either representatives on a board or employees, and two are in state government positions liaising with regional groups and rural local governments. It appears that this particular stakeholder group has had a negative experience with rural local governments in terms of working with regional organisations.

Despite articulating strong negative views about rural local government's capacity and commitment in terms of natural resource management, the stakeholders in Profile A still believe that this tier of government is critical to future sustainability. This is evidenced by their strong agreement with the statement that 'roads, rates and rubbish is no longer an option' (+4) and their positive reaction to the statements that suggest a commitment to natural resources needs to be articulated at the highest level of council (+2) and that council environmental officers need to be positioned in a key place in the administrative hierarchy of the shire (+2)

### **Profile B: Local government as redundant in natural resource management**

The distinctiveness of Profile B can be best illustrated by examining those statements that resonated strongly with stakeholders as either most or least like their experience. What is of interest is that this profile gives credence to the view that local government is not integral to natural resource management. There are loadings of (-4) given to the statements that 'successful management of natural resource management depends on local government taking a lead role' and 'a commitment to natural resource management needs to be articulated at the highest level by the CEO and Mayor'. Consistent with this view is that, in their experience, lobby groups typically bypass local government in relation to natural resource management (+3).

The perception that local government is not critical to natural resource management that is articulated in Profile B may be explained by examining the loadings of other statements. This profile had a very strong negative reaction to the statement that there 'are some dynamic and passionate individual staff and councillors who are committed to natural resource management and they are making a difference'. Despite the fact that this statement is qualified with the word 'some' this profile still registered it as (-5). This loading is one of five distinguishing statements in Factor B. It may be that this poor experience of levels of commitment has led some stakeholders to dismiss local government as having any role in natural resources. The same could be said for other key distinguishing statements. For example, because those loading in Factor B have had little experience of the natural resource management assisting a shire in developing a local identity (-4), or of the existence of appropriate local environmental data (+4) they may believe there is no role for local government in environmental management. Also contributing to this perspective may be their view that 'elected members and staff are not experienced in community engagement' (+5). Again, the fact that the Q-sorters may have had so little positive experience in this regard may have caused them to abandon any belief in local government's role in natural resource management.

It may be that they are focusing their attempts to progress a natural resource management agenda through other means. While this may include other tiers of government it is unlikely as Profile B is also defined by the fact that they very strongly endorse the statement that 'there is a lot of public distrust of government seeking community involvement'.

### **Profile C: Local government as having potential to manage natural resources, but facing challenges**

Those loading in profile C have had a much more positive experience of rural local government's management of natural resources. They assign high negative value to the statements that 'local government wants to control rather than be a partner in the management of natural resources' (-5). This is in distinct contrast to those who load on Factors D and B. Profile C also differed in giving negative assignments to the statements suggesting councils were isolationist, conservative and developmentalist.

This is not to suggest that the stakeholders loading in Factor C are entirely positive about rural local government's commitment to the environment. For example, they indicate agreement with statement such as 'an enthusiasm for vision statements of local governments is not matched by a commitment to detailed action and implementation plans' (+4), 'councils tend not to look at unless there is a specific problem' (+3), and 'local government environmental goals would be to make sure that the development you approve doesn't have any detrimental effects' (+2).

The more ambivalent attitude expressed towards rural local government's management of natural resources by those loading in Profile C may be explained by the fact that they believe there are some fundamental barriers to local government engaging an environmental agenda. For example, they have had little experience of local governments being able to use 'loopholes in state government legislation to impose population caps and other novel constraints on developments in their local areas' (-5). They also strongly believe that the 'political cycle at both a state and local level makes it difficult for any long term natural resource planning' (+4).

While highlighting some important barriers to rural local government's engagement in natural resource management, those Q-sorters in Profile C differentiate themselves from other sorters by the high loading they give to one potential environmental resource available to rural local governments; that is, the community. What is evident is that there is a strong perception among those in Profile C that community members are interested in natural resource management issues, but they are often unlikely to use this language. Those in Profile C had a very strong experience of the statement that argued, 'Even if the community isn't using the term natural resource management, they are still very likely to be interested and committed to the issues. They might just talk about it was water, logging or something like that'. This was rated as (+5) by those constituting this profile while the majority of other profiles loaded it negatively.

### **Profile D: Local government as representing selective interests in natural resource management**

This profile has some strong similarities with Profile A. This is exemplified by the fact that both profiles give a high positive factor score to item 12, which positions rural local government as 'conservative and developmentalist'. These two profiles also strongly agree that 'councils are more familiar with engineering works, with the more traditional sets of tangible costs and benefits' than they are with the costs of environmental degradation and loss. Also common to both profiles is the selection of some statements that were seen to be most unlike the experience of participants. The statement 'rural local governments have moved from a siege mentality to a proactive agenda in relation to NRM' was identified as most unlike (-5) the experience of both profiles. They also shared an equally negative experience of local governments' record on community consultation.

While Profile D shares some similarities with Profile A, it also bears some resemblance to Profile B in suggesting that an environmental agenda for Australia may be successfully developed by by-passing local government. This can be illustrated by the fact that there is very strong disagreement for the statement that 'roads, rates and rubbish is no longer an option'. These respondents appear to believe that local government can continue to focus on a narrow and traditional set of roles and responsibilities, and that other groups or tiers of government will progress a sustainability agenda.

Further to the similarities Profile D shares with Profiles A and B are some similarities with Profile E. This is evident in the high level of emphasis Profile D Q-sorters give to consultation and the involvement of community groups in council's management of natural resources. They express high positive support for statements such as 'local government needs to focus on educating and empowering the community about natural resource management' and 'councils should provide in-kind and direct financial assistance to community based groups dealing with natural resource management'.

Given the similarities between Profiles A and other profiles it is critical to examine where Profile D deviates from its counterparts. Two issues require highlighting. The first concerns the differential loading on Profile D accorded to the statement 'lobby groups bypass local government about'. Those situated within Profile D strongly disagree with this statement. Given that those Q-sorters loading in this factor are representative of a range of different lobby groups it is possible that they themselves have sought action through their local government. Importantly, other profiles have either loaded as agreeing with this statement or felt it to be a statement on which they had no strong experience/opinion. The second noticeable feature of those loading on Profile D is that respondents gave the highest possible score (+5) to the statement 'in rural shires certain individuals and groups have greater political power and their voices are heard most strongly when questions are asked about natural resource management'. Those in Profile A also agreed with this statement (+3), but to a lesser degree while others rated it as not important or disagreed with it.

### **Profile E: Local government as a partner in natural resource management**

The stakeholders loading in Profile E can be differentiated from the other participants in that they agree strongly that councils must address natural resource management through engagement with the community. They articulate such a stance by assigning a highly positive value (+5) to statements such as 'councils should provide in-kind and direct financial assistance to community based groups dealing with NRM' and 'one of councils' roles is to go out to people and articulate NRM goals in a language they understand and get them on board'. This latter statement is one about which Profile B respondents were diametrically opposed rating it as (-5). While recognising the critical role of community engagement in sustainability initiatives, Profile E also acknowledged how time consuming such an undertaking can be. They did not believe, however, that there needed to be environmental staff with specialist skills in community consultation. This is perhaps because they believe that such skills are already available within local councils.

It is also that those defining Profile E have had a positive experience of community consultation in the local government sector in relation to natural resources. They have had very limited experience (-4) of local government 'wanting people's participation but fearing it more' or of 'certain groups and individuals having greater political power' and having their voices 'hear most strongly when questions are asked about natural resource management' (-3). They also

believe that local governments are experienced 'in relation to community consultation' and that local governments 'have a strong record on community consultation as they are the closest to the people'.

Importantly, those loading on Profile E do not position local government as wholly responsible for natural resource management. They strongly disagree with the statement that 'local government has to lead the community on natural resource management and not be a follower' which suggests that they understand environmental management as requiring a partnership rather than a leader and a follower.

## **Conclusion**

This paper has asked how stakeholders view local government management of natural resources in rural Australia. Stakeholders have expressed a continuum of beliefs and experiences about rural local government and natural resource management that has been classified into five key profiles. What is important to recognise is that these disparate views and experiences will inform how stakeholders interact with rural local governments, and ultimately, the future potential of rural local governments to progress an environmental agenda. It is thus concerning that there are some stakeholders who have had very negative experiences of local government management of natural resources. There is clearly significant work to do to shift stakeholder opinion to that most closely resembling those who loaded in Factor 5 and see local government as a partner in natural resource management. It is also of concern that those who need to support rural local governments in mobilising stakeholder support – that is, other government representatives - may themselves be dismissive of the important role councils have to play in sustainability. There is unlikely to be little significant change in local environmental progress in the absence of strong, collaborative networks of trust between councils and environmental stakeholders in government and the community . The nurturing and growing of such relationships should therefore be seen as critical to future environmental policy in Australia.

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