

Facilitating local organisational development for advancing sustainable urban water futures

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ABSTRACT

This paper presents the local institutional and organisational development insights from a five-year ongoing interdisciplinary research project focussed on advancing the implementation of sustainable urban water management. While it is broadly acknowledged that the inertia associated with administrative systems is possibly the most significant obstacle to advancing sustainable urban water management, contemporary research still largely prioritises investigations at the technological level. This research is explicitly concerned with critically informing the design of methodologies for mobilising and overcoming the administrative inertia of traditional urban water management practice. The results of 14 in-depth case studies of local government organisations across Metropolitan Sydney primarily reveals that the political institutionalisation of environmental concern, and commitment to local leadership and organisational learning are key corporate attributes for enabling sustainable management. A typology of five organisational development phases has been proposed as both a heuristic and capacity benchmarking tool for individual practitioners, and local and state government program designers for improving the level of local implementation of sustainable urban water management activity. While this investigation has focussed on local government, these findings do provide guideposts for assessing the development needs of future capacity building programs across a range of different institutional contexts.

KEYWORDS

Capacity Building, Local Government, Organisational Development, Urban Water

INTRODUCTION

Review of both Australian and international research reveals that there is an increasing acceptance that there appears to be far more socio-political impediments to sustainable urban water management (SUWM) in contrast to the opportunities associated with innovative technical solutions. While various commentators have highlighted the significant change in community waterway values over the last 30 years and advances in sustainable water management technologies, this context alone has not been enough to mobilise change within contemporary administrative regimes (Brown *in press*).

While it is acknowledged that there is limited investigation and reported research into SUWM implementation impediments, there are certainly a number of specific impediment themes observed across the western world. Implementation issues typically highlighted as impediments to enabling wide-spread practice of SUWM include undefined organizational responsibilities, limited political incentives and disincentives, poor organisational

commitment, technological path dependency, poor community capacity to meaningfully participate and an overall lack of experiential knowledge with facilitating integrated management approaches (see for example Marsalek and others 2001, Mouritz 1997 and 2000, Newman and Kenworthy 1999, Vlachos and Braga 2001). The outcome of these interrelated institutional impediments, argued by some as institutional inertia, is that unsustainable water management approaches are likely to prevail without significant programs of change focusing on institutional values, knowledge and rules (Brown *in press*).

The international sustainable cities commentary acknowledges that the prospect of changing traditional institutional settings is a long-term, and sometimes a daunting prospect, but should be tackled in prioritised stages (Wakely 1997). The current priority advocated by this community is improving the capacity of local government. This is because local government typically has the weakest institutional capacity compared with other levels of government and the business sector, yet is recognized as the most important sector for significantly enabling on-ground change towards sustainability (Peltenburg et al 2000, Wakely 1997, UNDP 1998).

As observed by Wakely (1997) and Brown (2003), the organisational and broader institutional context presents as great an impediment to the sustainable management of urban places as the inability of professionals, technicians and ordinary people to operationalise sustainable development. Therefore, local government capacity for SUWM involving effective, efficient and responsive environmental governance is dependant on not only having sufficiently developed human resource capacity but also sufficient capacity within organisational and institutional contexts (Wakely 1997, UNDP 1998, Peltenburg et al 2000).

THE RESEARCH INVESTIGATION

Reported here is the outcome of research activities investigating local administrative capacities as related to SUWM implementation practices across Metropolitan Sydney between 1999 and 2004. An independent evaluation, as detailed in Brown (2003), revealed that of the 44 local government government organizations, there were 5 high, 20 average and 19 low performing organizations in relation to on-ground SUWM implementation activities. The evaluation also concluded that the differential between the high performing and average performing Councils was more substantial than between the average and low performing councils and hence an overall skew to under performing organisations.

A representative group of four cases from each of the high and low performing local government organizations and six from the average performing organizations were selected for in-depth analysis. This involved detailed social and organisational case study research techniques as outlined by Yin (1994). The key research question explored included- *What are the important developmental characteristics of local government organisations for improving SUWM implementation performance?* It was anticipated that once these characteristics were reliably determined then institutional development and organizational change management strategies could be rigorously developed, trialed and empirically tested. It was also hoped that a typology of the varying local administrative contexts would provide a useful heuristic tool for individual professionals, and local and state government capacity builders to enable strategic links between organisational change and advancing SUWM practices.

FINDINGS: ORGANISATIONAL CAPACITY AND DEVELOPMENT

Upon completion of the 14 organisational case studies, (representing over 25% of local government organizations located within Metropolitan Sydney) it was possible to infer transitional stages in the development of organisational dynamics with respect to SUWM implementation. While transitions between stages within an individual organisation was not empirically observed, because the research was not longitudinal by design, the common and distinguishing variables between the cases provides strong evidence of adaptation between different levels of practice from traditional urban water management towards SUWM.

Therefore, when critically contrasting the results of each of the 14 studies five organisational development phases emerged. It was clear that these five stages had common and distinguishable levels of SUWM action, political capital, expertise and organisational structure as well as identifiable organisational cultures. As depicted in Figure 1, research findings revealed that the low performing organizations were operating in a *project* context, whereas the high performing organisations were operating in an *integrated* context. The research also revealed three further development phases starting with the *outsider*, followed by a *growth* phase and then *insider* developmental phase.

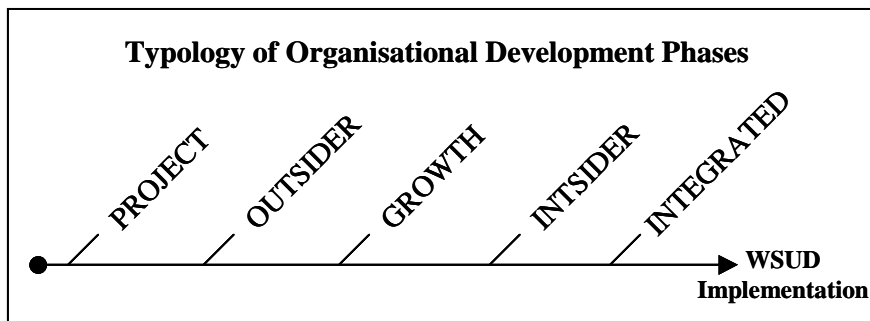


Figure 1. Continuum of Organisational Development Phases

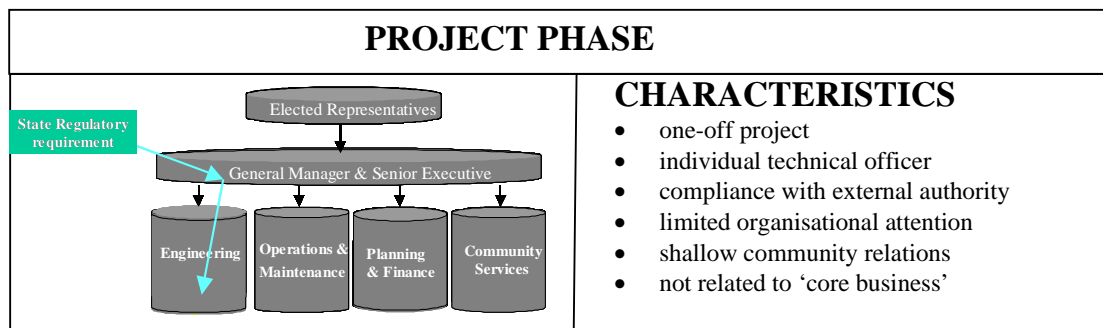


Figure 2. Low Performing Organisations: the project phase

The results of the low performing case studies (see Figure 2) clearly revealed that SUWM was not a priority for the organisation and that any activity undertaken by the organisation was only driven by a need to achieve a minimal level of regulatory compliance with State Government obligations. In this instance, the regulatory direction from the State, as

administered through the New South Wales EPA between 1999 and 2003, for the preparation and implementation of stormwater management plans was responded to with minimum attention. Internally the work was allocated typically to a junior engineer and then contracted to an external consultant to meet the organisation's regulatory obligations. There was no effective engagement of other stakeholders or the community. Since preparation of the plans, those organisations have not met their stated implementation intentions. Overall the SUWM was treated as an unnecessary *project* that has minimal relationship with the core business of the organization.

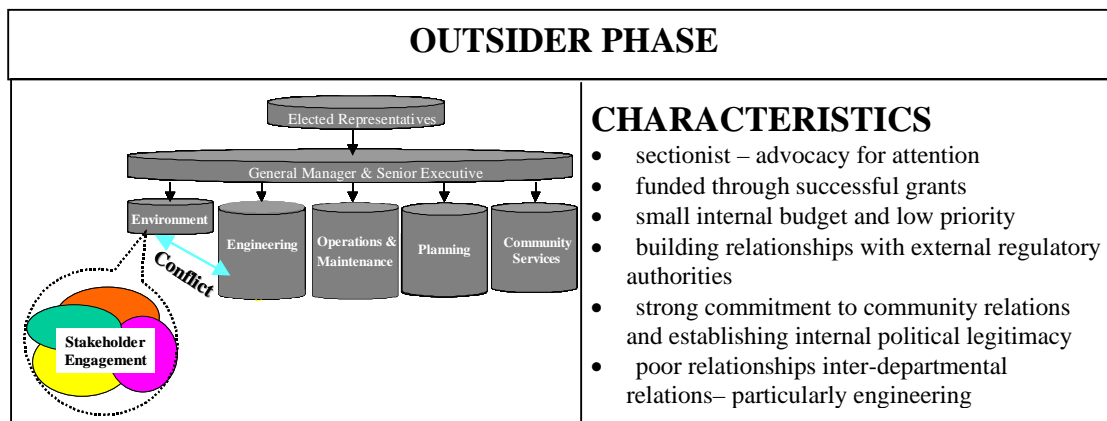


Figure 3. Variable Performing Organisations: the outsider phase

The outsider organisational development phase (see Figure 3) can be described as an individual or small group of officers having some form of 'environmental' label (either a very small new department or team within an established department) that are struggling to attract limited organisational resources for IUWM activities. There was evidence of conflict around perceived roles and responsibilities with other sections of the organisation, in particular with the sections responsible for public infrastructure and development approvals. This *outsider* group focused on writing innovative grant applications and finding means to work with state agencies and other funding bodies for meeting broader obligations and principles for more sustainable urban water management activities. As part of this advocacy, of particular note, is this group's dedication to building external stakeholder relationships through outreach strategies with regulatory authorities and community groups. The implicit objective of this work is to build external political capital in an attempt to realise internal organisational legitimacy and influence to advocate for more resources to support sustainable management practices.

The growth organisational development phase (see Figure 4) reflects the environmental (and sometimes sustainability agenda) gaining *growing* prominence as reflected in the increased staff size, budget and corporate reporting within the organisation in contrast to the *project* and *insider* phases. Like the insider phase, this could be a separate environmental department or a larger group within an established department, however this team of people have been successful in winning project based external grants and support. The team has also been successful in gaining organisational attention through highlighting future economic and reputational risks to the organisation for inaction around environmental issues and perceived concerns. There is now an established extended stakeholder network with increasing expectations of their potential to influence and/or inform environmental decision-making.

While there appears to have been significant growth in the environment agenda, particularly water, there is still significant tension and confusion over roles and responsibilities between departments and groups within the organisation resulting in inconsistent and ad-hoc projects.

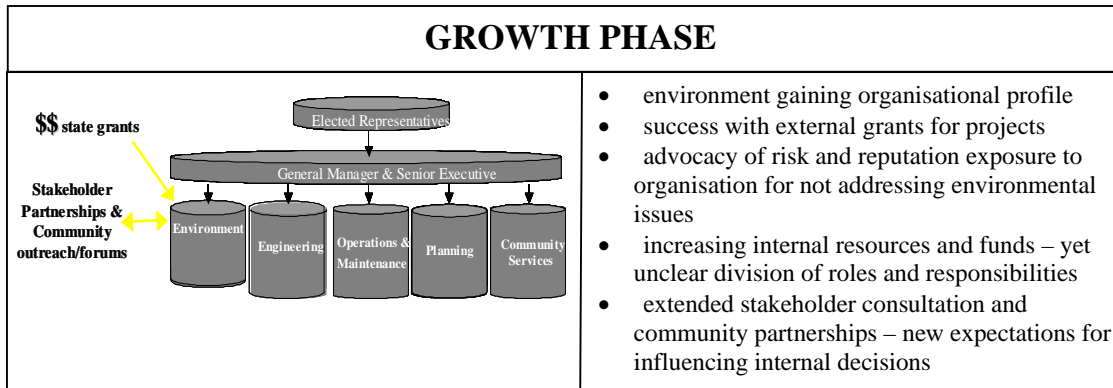


Figure 4. Variable Performing Organisations: the growth phase

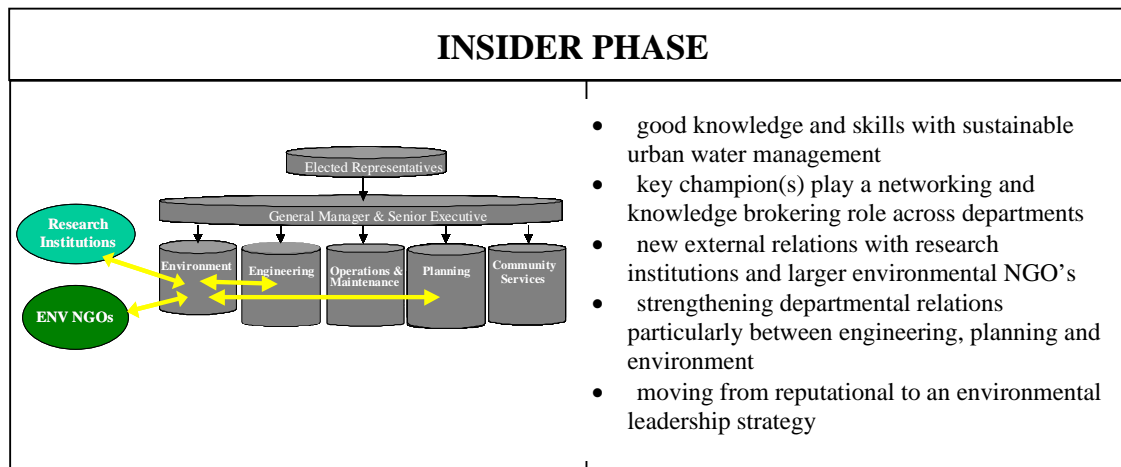


Figure 5. Variable Performing Organisations: the insider phase

The insider organisational phase (see Figure 5) represents yet another significant shift in organisational dynamics. These organisations appeared to have good knowledge of their water systems and water environment and increasing competency with implementing end-of-pipe pollution control techniques and education initiatives. Of particular note is the observation of a high profile organisational champion(s) for sustainable urban water management typically playing a networking and knowledge brokering role across and within organisational departments. This results in a number of project collaborations between engineering, planning and the environment departments– yet limited collaboration in other areas. Part of the catalyst for these new projects is related to the relationships that the champion develops with key research institutions and larger scale environmental NGO's. The attention and interest of other departmental managers are captured through the perception of conducting 'cutting edge' projects. This therefore attracts management and senior executive attention and soon becomes part of the organisational leadership strategy and consequently

increasing external and internal resources to this area. Of particular distinction is that other departmental areas are starting to perceive a legitimate organisational role for the expertise of the environment area – and therefore becoming an *insider*.

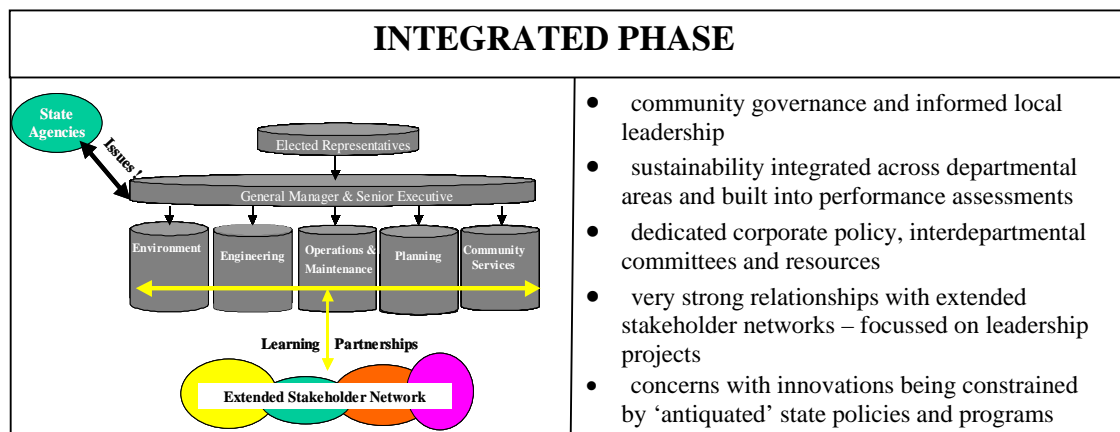


Figure 6. High Performing Organisations: the integrated phase

The high performing organisations (see Figure 6) demonstrated the highest degree of integrating sustainability principles and practices in various forms across the organisation. The high value placed on community governance and participation was observed from senior to the junior levels of the organisation. There are dedicated corporate policies and resources dedicated to the environment (typically an additional environmental levy) as well as an active inter-departmental committed to sustainable water management activities. The value of organisational learning and research is high as well as reinforcing the reality and outside perception that the organisation is a leader in its field. Of particular note is the poor opinion these organisations have of state agencies. In particular, these organisations feel constrained by contemporary state policies and programs with concerns of having innovation stifled by outsiders. The public articulation of this view is highly tempered to ensure ongoing success with attracting additional external resources.

HUMAN RESOURCE AND ORGANISATIONAL CAPACITIES

The case studies of differing levels of organisational implementation performance revealed the changing human resource and organisational capacities, with particular distinctions between the *project* and *integrated* phases. More broadly observed across the cases was the increasing internal political priority of the environment where it was almost non-existent in the *project* phase, largely driven by a reputational need in the *growth* phase and inherent to organisational leadership in the *integrated* phase. It was also clear that external resource opportunities through state grants have been used by the more entrepreneurial organizations for attracting internal attention and resources.

With respect to the individual water officers there appeared increasing experience and competence in environmental planning, facilitation, negotiating, networking and organisational relationship building. However, technical competence with the design and management of urban water management technology did not prove to be an essential ingredient, particularly where this specialised technical skill could be harnessed as an important input from elsewhere within the inter-organisational context. The level of

individual professional frustration associated with organisational activities also demonstrably decreased in the higher end of the organisational development continuum. Also observed was the increasing level of organisational power held by the individual officers. The higher end of the continuum tended to have officers in more senior roles and influence over more organisational resources. This therefore impacts on the officer's potential to attract high levels of organisational support in terms of time and dedicated resources.

It was evident from the research that the intra-organisational operating context was the key factor for determining the level of success with implementing SUWM. The increasing level of political and organisational commitment to environmental management more broadly was a strong indicator of performance. This needs political commitment from within the organisation as expressed through departmental management systems, a committed interdepartmental policy community and appropriate dedicated organisational resources. Integral to this commitment is the breadth, quality and priority placed on relationships established for an extended stakeholder network interested in the management of environmental resources. The maintenance and development of this inter-organisational action appears instrumental for mobilising attention and political power for facilitating SUWM.

CONCLUSIONS

While the results of the different phases observed in organisational dynamics has been simply represented as a model of linear progression, there is no evidence to suggest that organisations could not move both up and down the continuum as well as jumping and/or straddling phases based on changing circumstances. It is also possible that these phases are more discontinuous than represented. In absence of comparative detailed research from alternative institutional contexts for verification or otherwise, this organisational development relationship remains a tentative hypothesis. Nonetheless, this does not detract from its intent of enabling critical reflection, discussion and the design of organisational development and change management strategies given the limited available evidence in this field.

Further, these case-based insights strongly indicate that to achieve broad institutional change, it is important that the principle of organisational and cross-sectoral interaction underpins all forms of regulatory, economic and educative policies. It is also important that a local organisational capacity analysis is conducted and targeted at understanding what potential incentives and disincentives would be most effective in enabling SUWM. These assumptions need to be explicit throughout all policy processes and tested and validated as part of an adaptive policy cycle. Overall the following concepts appear essential for enable system-wide organizational change:

- incentives and disincentives for enabling intra and inter organisational interaction
- regulation of organisational capacity rather than production of plan documents
- mobilization of local political and community support, and
- information and measurement systems for benchmarking and reporting on organisational capacity

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