

Re-thinking institutional capacity-building: Lessons from Australia

P. Morison^{1,2*}

¹ *Centre for Water Sensitive Cities, School of Geography & Environmental Science, Building 11, Clayton Campus, Monash University, Victoria 3800, Australia*

² *Melbourne Water, 100 Wellington Parade, East Melbourne, Victoria 3002, Australia*

**Corresponding author, e-mail peter.morison@monash.edu*

ABSTRACT

This paper builds on previous research of stormwater programs by considering the design and application of institutional capacity-building for achieving sustainable forms of stormwater management across a large metropolitan area. This research fills a considerable gap in the design of capacity-building programs by accounting for the interdependent variables of capacity and commitment within socio-political contexts. The devised capacity-building framework provides a suite of customised interventions which accord with typical implementation behaviours of program partners involved in sustainable forms of stormwater management. Drawing from an intergovernmental stormwater program in Melbourne as an analytic, examples of interventions are presented within the framework that are transferable to other stormwater capacity-building programs around the world. The framework illustrates a completely new way to approach institutional capacity, one which is guided by the socio-political development of a region and indicative of more reflexive modes of urban stormwater governance. An important conclusion for policy-makers and program architects is that stormwater programs need to incorporate these variables in their design in order to truly build the capacity of their subjects.

KEYWORDS

Australia; institutional capacity; intergovernmental programs; local government; stormwater

INTRODUCTION

Institutional capacity-building is “the process through which individuals, organizations and societies obtain, strengthen and maintain the capabilities to set and achieve their own development objectives over time” (UNDP, 2007, p. 4).

For the past decade, capacity-building has been the mainstay of stormwater programs in many parts of the world. In Australia, programs have focused on the human resource capabilities of the industry, particularly within local government, to implement sustainable forms of stormwater management. More recently, the scope of capacity-building in the same programs has extended from the needs of the individual professional to the whole municipal organisation. With responsibilities for drainage in many parts of Australia, municipal councils are typically the loci of interventions, where information and support is imparted both horizontally and vertically across the individual organisations.

While the recent development in capacity-building indicates a maturing toward a model of best practice (see Brown *et al.*, 2006), the program innovations are generally limited to the allocation of resources according to managerial and technical need and do not relate to the socio-political context that largely defines the capacity of an organisation. Such interventions focused on an individual, organisational dimension in isolation are insufficient without comprehensive assessment of existing capacity and respective development needs across professional, inter-departmental, organisational, and institutional dimensions associated with stormwater management (Brown, 2008). This is apparent in the literature where previous attempts at capacity-building have tended to focus wholly on professional training and development programs with the view that increased knowledge would lead to improved practices. However, these programs have not been as effective as anticipated because the wider organisational and institutional arrangements have impeded the change (Brown, 2005; Wakely, 1997).

Moreover, the commitment of organisations and key actors is often overlooked in the design of capacity-building programs. There is an inherent assumption that building capacity will induce the enablement of organisations and actors to meet the needs of their clientele or citizenry. Yet, capacity and commitment are symbiotic – both are interdependent and cannot be considered in isolation. While capacity-building may positively influence commitment, commitment-building may also positively affect capacity (Morison and Brown, 2007).

Bringing the variables associated with capacity and commitment together provides a composite which has been described by Winter (1999) as ‘implementation behaviour’. For program design, its application is important for explaining and generalising about variations in the response of agents vested with the implementation of new forms of stormwater management. The composite can act as both a measure of response and a pre-determinant of program outcomes, both of which are necessary for the design and calibration of capacity-building programs.

This paper builds on previous research of stormwater programs by considering the design and application of institutional capacity-building for achieving sustainable forms of stormwater management across a large metropolitan area. Central to this research is a multiple case study of an intergovernmental stormwater program involving a state government waterways manager and thirty-eight municipalities in metropolitan Melbourne.

According to the preceding research undertaken by the author, the metropolitan area of Melbourne exhibits variable institutional capacity at the municipal level, mainly declining from the CBD to the periphery of the region (Morison *et al.*, 2010). The majority of variation is attributed to the ‘greenness’ of the municipality, the economic status of the municipal organisation, and the population, income and education of the municipal community (Morison and Brown, 2011). From the research, three types of municipalities emerged that displayed distinct forms of implementation behaviour. Recent research of rural Australian local government organisations (Pini, 2009) also revealed similar behavioural types for the implementation of environmental programs, thereby confirming the reliability of this research.

The results of this research demonstrated that the traditional approach to capacity-building is likely to be highly ineffective when targeting different stormwater managers. Instead, capacity-building programs need to include innovative and flexible mechanisms that are

responsive to the geographically-variable dynamics of implementation behaviour (Morison and Brown, 2010).

Since the research, it is now generally accepted in Melbourne that the state government and municipalities need to critically address these localised attributes in order to control and ameliorate stormwater runoff that is shared between the two levels of government. In particular, the regional waterways manager – Melbourne Water – has adopted the research recommendations and instituted a comprehensive assessment of its municipal partners ‘needs’ prior to formulation of its capacity-building programs (Bolton *et al.*, 2007).

The intent of the regional waterways manager is to use the results of the assessment to prescribe a suite of capacity-building interventions that are tailored to the implementation behaviour of its partners. However, little guidance is available for this step to proceed with any prediction of its empirical effect. Hence, this paper aims to fill the gap in the design of capacity-building programs by considering a suite of customised interventions which accord with typical implementation behaviours of program partners. Using the intergovernmental stormwater program in Melbourne as an analytic, examples of interventions are presented within a framework that is transferable to other stormwater capacity-building programs around the world.

METHODS

A multiple case study research approach (Yin, 2003) was employed to analyse the capacity and commitment of the 38 municipalities across Melbourne. A mixed-method research agenda included a synthesis of multiple data sources, including: i) documentary analysis of municipal stormwater management plans, annual reports and management strategies; ii) an online survey of 116 local government professionals; and, iii) semi-structured interviews of 126 local government professionals and 21 elected officials. The four data pools are a combination of public and confidential sources that have been triangulated to determine the implementation behaviour of the municipal organisations within the study area. A comparative assessment of the relative capacities and commitment of these organisations to implement Water Sensitive Urban Design was subsequently conducted.

After determining municipal implementation behaviour, a second data collection phase entailed initially a comprehensive review of capacity-building interventions from around Australia that were designed to develop sustainable forms of stormwater management (such as Water Sensitive Urban Design). While the results of this review are reported in detail elsewhere (Lloyd *et al.*, 2008), a sample of the interventions are identified in this paper.

The final phase of data collection involved bringing together the collective opinions of officers within the program network and independent specialists within the stormwater industry to review appropriate capacity-building interventions for the municipal subjects. In order to do this, an interactive policy forum (‘roundtable’) was proposed as an alternative to interviewing key program actors for their opinions on the efficacies of relevant interventions (Howlett *et al.*, 2006). The conception of the roundtable was modelled on a number of similar approaches, such as the ‘sustainability roundtable’ in Western Australia (DPC, 2008) and the ‘transition arena’ in the Netherlands (Loorbach, 2007), for building consensus around solving complex environmental problems. The approach also aims to overcome the limitations experienced by many implementation researchers by providing simultaneous access to both the policymakers and the implementers (Schofield, 2001).

Out of the three phases, data was collated to yield a capacity-building framework which can be applied to catchment-wide stormwater management problems. The framework is presented in the following section.

RESULTS AND DISCUSSION

The capacity-building framework (Figure 1) has been designed with the assumption that a catchment problem requires a whole-of-catchment commitment. The consequence of one organisation shirking responsibility while another is striving to commit resources to sustainable stormwater management creates a classic conundrum that can be addressed by applying this framework.

Elements of the capacity-building framework

To employ the framework, a comprehensive form of assessment (e.g., Morison *et al.*, 2010) is conducted to determine the level of capacity and commitment (implementation behaviour) of each organisation to sustainable stormwater management. Potentially three distinct groups of organisations can be identified from the assessment, which are generically labelled low, medium, and high performing (see Brown, 2008). The high performers will be identified by their ability to progress sustainable forms of stormwater management independently. The medium performers will display a commitment to sustainable stormwater management, but will lack the capacity to undertake projects without external support. The low performers will typically lack commitment to sustainable stormwater management even where capacity is at a suitable level.

Capacity-building tools. Differentiating organisations into high, medium and low ‘performance’ groups leads to three possible sets of capacity-building tools that could be employed in a program. Respectively, they are identified as learning, developmental and motivational tools. At an abstract level, the three toolkits correspond with the well-known paradigms of interactive policy networks, bottom-up markets, and top-down command-and-control (Powell, 1991).

In applying the tools of learning, a ‘co-production’ perspective on managing implementation is fitting and embraces managing outcomes as shared between parties. Associated with their high performance, the parties are considered mutual partners of stormwater management, as distinct to the low and medium performing organisations. Discretion and cooperation are central components of implementation. Typical processes include enhancing the professional delivery of services, idea-sharing and institutionalising client participation. As a result, high performers should be given the space to learn, experimenting with sustainable forms of stormwater management, share their insights with organisational peers, undertake detailed monitoring and evaluation, and broadly promote their innovations.

Developmental tools are implemented from a standpoint of improving performance that embraces management by outputs, creating the necessary relationships of governments with contracted purveyors and consultants, establishing the frameworks for direction of the parties, and maintaining compliance with conditions of contract, and pre-determined policy targets. The medium performers will need help, and hence the application of development tools. Demonstration sites that are joint initiatives between the mentor and the mentored and risk-underwritten will help to encourage further confidence in sustainable stormwater management (Farrelly *et al.*, 2009). These sites will not demonstrate innovative forms but will be designed

with existing technologies as a proof-of-concept facility for the locality. Co-management of the project will be essential, and ideally, sites should be shared between organisations as hubs for capacity-building. Planners will be important to engage and to link the demonstrations to other environmental policy. The involvement of high performing organisations in the capacity-building of these peers may be helpful, if welcomed. For example, the parochial nature of local government will always mean that duplicated local projects are imperative to building municipal confidence.

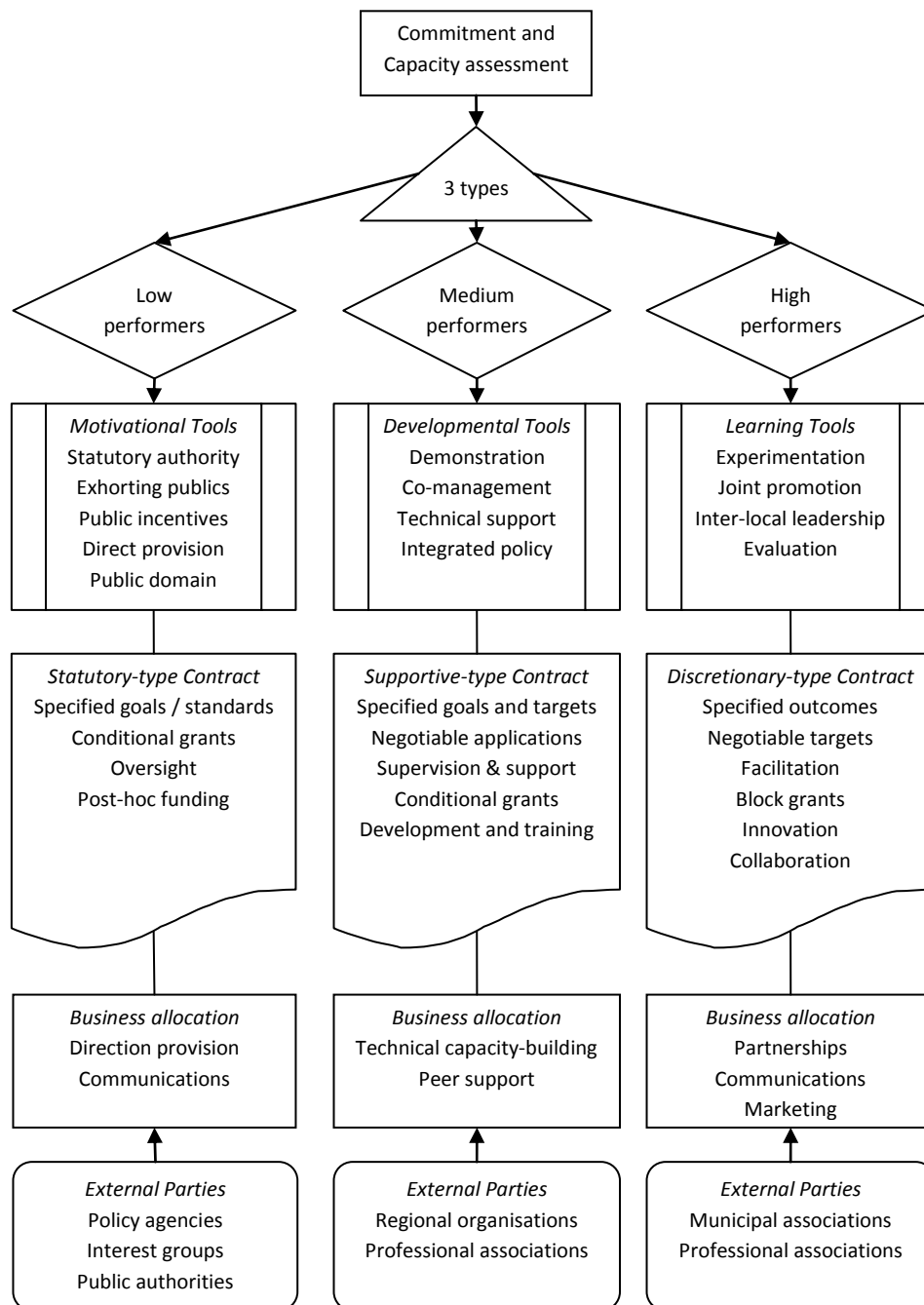


Figure 1. Capacity-building framework

Motivational tools associate with a perspective of compliance that embraces: management via inputs; a comprehensive formulation of legislation and policy; the clear assignment of roles and responsibilities; the provision of support to carry out requisite tasks; and maintaining compliance with standard procedures. The low-performing group requires motivation. How this occurs will depend on the local context. Nonetheless, all of these organisational types will need to be given a clear business case in the form of legislative authority. Given this is a lengthy process, interim measures should include sustainable stormwater management protagonists directly providing the services to local communities according to their needs in association with interest groups (e.g. citizens groups, chambers of commerce, progress associations) and in the public domain (e.g. school grounds, government sites, regional parks). This can stimulate a laggard to engage with the program through processes of corporate shaming and public exposure (Gunningham and Sinclair, 2002). Public communications exhorting communities to get involved and providing incentives to provide sustainable forms of stormwater management on private land may be another strategy to encourage the cooperation of reluctant public organisations.

Contracts. Widespread implementation of sustainable stormwater management may rely on contractual agreements in association with capacity-building interventions (Stoker, 1991). Contracts with each type of organisation follow a function of increasing supervision with decreasing performance. For the high performers, discretion should be encouraged to build on the existing trust. Hence, outcomes rather than targets would be best defined with the option for each organisation to assign targets with the assistance of the program leader. Funding would be in the form of block grants assigned as a fixed amount with few conditions for the implementation of sustainable stormwater management. The organisations would be encouraged to undertake projects that are locally relevant, experimental and provide opportunities to influence the less willing and able organisations. Projects that are earmarked for collaboration should be prioritised.

The medium performers require more supervision and should be given more developmental support than the high performers. The contract would clearly specify the water quality goals and targets for the organisation to achieve with detail of the means of achievement. Recipients would be given the opportunity to negotiate the types of stormwater measures used to meet these targets with the assurance of the program partner's technical and financial support. Conditional grants are the most effective funding for these organisations, but up-front payments should be a consideration to ensure project initiation.

For the low-performers, goals and standards (in addition to targets) shall be defined in relevant statutes. These organisations will only implement sustainable stormwater management when it is sanctioned. However, program leaders should beware of the organisational backlash associated with unfunded or underfunded mandates (Cimitile *et al.*, 1997; Gormley, 2006; Norton, 1995). Hence, funding options should be considered to marry with the mandated work. Assuming regulations are not in place for some time to legitimately obligate stormwater improvement, contracts for the low-performing organisations may only be written in cases where a commitment is made to a community project. Post-hoc funding should be provided where the organisation's obligations to the project have been fulfilled. In these instances, strong supervision will be required.

Business allocation. Capacity-building program managers should allocate and apportion their business according to the three forms of implementation behaviour. Dealing with high-performers, their involvement should not be intense but rather a partnership that increases

intelligence across the partner organisations. Promotion of innovative projects in their locales may involve communications and marketing personnel. Capacity-building specialists, on the other hand, will be most intensively involved with the medium-performers in providing technical and financial support. Targeting these organisations with the help of the high-performing peers may be beneficial. In the localities of low-performing organisations, direct provision of measures to manage catchment stormwater pollutant loads may be required. This program may stimulate the community initiative required to gain the recognition and commitment of the targeted organisation. Again, the communications team will be important in promoting sustainable stormwater management to local communities.

External parties. The role and involvement of external parties will differ according to performance. High-performers may benefit most in partnership with larger groups such as municipal organisations and professional associations. These partnerships will provide further promotion and extension of sustainable stormwater management. Similar external parties may be involved with medium-performing councils; however, they are probably more localised. Nonetheless, committed professional associations may help foster greater confidence in sustainable stormwater management among these organisations. While government policy agencies are necessary for all types, they are imperative for legitimising the application of sustainable stormwater management among the low-performing organisations. Local interest and environmental groups will play an active role in projects within these areas. Other external players may be schools, parks managers, roads authorities, etc.

Programmatic capacity

While the commitment and capacity of organisations guides the choice and development of capacity-building programs, it is important that the capacity of the capacity-builders themselves is not overlooked. Choices should be further determined by the level of programmatic capacity, or the nature of its management and expertise, to administer the tools. According to Howlett (2000), regulatory or information tools (such as planning provisions and guidelines) and voluntary and community-implemented schemes are less onerous on program managers than market-based or subsidy instruments and the direct provision of goods and services. Hence, according to the capacity-building framework, while the majority of effort may be targeted at the medium-performing organisations, it should be considered in terms of the accrued benefits achieved from the capacity-building interventions.

CONCLUSIONS

The capacity-building framework arising from comprehensive case study research in Melbourne illustrates a completely new way to approach institutional capacity, one which is guided by the socio-political development of the region and indicative of more reflexive modes of urban stormwater governance. An important conclusion for policymakers and program architects is that stormwater programs need to incorporate these variables in their design in order to truly build the capacity of their subjects.

ACKNOWLEDGEMENT

Appreciation is given to the many participants from local and state government involved in this PhD research. It was funded by a scholarship from Melbourne Water.

REFERENCES

- Bolton, A., Edwards, P., Lloyd, S. and Lamshed, S. (2007). Needs analysis: An assessment tool to strengthen local government delivery of Water Sensitive Urban Design. Proc. 5th Int. Water Sensitive Urban Design Conf., Sydney, Australia, 21-23 August 2007. CD-ROM, Engineers Australia.
- Brown, R.R. (2005). Impediments to integrated urban stormwater management: The need for institutional reform. *Environ. Manage.*, **36**(3), 455-468.
- Brown, R.R. (2008). Local institutional development and organisational change for advancing sustainable urban water futures. *Environ. Manage.*, **41**(2), 221-233.
- Brown, R.R. and Farrelly, M.A. (2009). Challenges ahead: Social and institutional factors influencing sustainable urban stormwater management in Australia. *Water Science & Technology*, **59**(4), 653-660.
- Brown, R., Mouritz, M. and Taylor, A. (2006). Chapter 5: Institutional Capacity. In: Wong, T.H.F. (ed.), Australian Runoff Quality: A Guide to Water Sensitive Urban Design. Engineers Media, Crows Nest, NSW, pp. 5/1-5/20.
- Cimitile, C.J., Kennedy, V.S., Lambright, W.H., O'Leary, R. and Weiland, P. (1997). Balancing risk and finance: The challenge of implementing unfunded environmental mandates. *Public Admin. Rev.*, **57**(1), 63-74.
- DPC (2008). The Sustainability Roundtable. Department of Premier and Cabinet, Perth.
- Gormley, W.T., Jr. (2006). Money and mandates: The politics of intergovernmental conflict. *Publius*, **36**(4), 523-540.
- Gunningham, N. and Sinclair, D. (2002). Leaders and Laggards: Next-Generation Environmental Regulation. Greenleaf Publishing, Sheffield.
- Howlett, M. (2000). Managing the "hollow state": Procedural policy instruments and modern governance. *Can. Public Adm.*, **43**(4), 412-431.
- Howlett, M., Kim, J. and Weaver, P. (2006). Assessing instrument mixes through program- and agency-level data: Methodological issues in contemporary implementation research. *Rev. Policy Res.*, **23**(1), 129-151.
- Loorbach, D. (2007). Transition Management: New Mode of Governance for Sustainable Development. International Books, Utrecht.
- Lloyd, S., Shaw Rungie, A., Morison, J. and Morison, P. (2008). Incentives to Stimulate Innovation in Water Sensitive Urban Developments. Report prepared for National Water Commission by EDAW, Melbourne.
- Morison, P. and Brown, R. (2007). Cooperate or coerce? Intergovernmental approaches to mainstreaming Water Sensitive Urban Design. Proc. 5th Int. Water Sensitive Urban Design Conf., Sydney, Australia, 21-23 August 2007. CD-ROM, Engineers Australia.
- Morison, P.J. and Brown, R.R. (2010). Avoiding the presumptive policy errors of intergovernmental environmental planning programmes: A case analysis of urban stormwater management planning. *J. Environ. Plann. Manage.*, **53**(2), 197-217.
- Morison, P.J. and Brown, R.R. (2011). Understanding the nature of publics and local policy commitment to water sensitive urban design. *Landscape Urban Plann.*, **99**(2), 83-92.
- Morison, P.J., Brown, R.R. and Cocklin, C. (2010). Transitioning to a waterways city: municipal context, capacity and commitment. *Wat. Sci. Tech.*, **62**(1), 162-171.
- Norton, R.K. (2005). Local commitment to state-mandated planning in coastal North Carolina. *J. Plan. Educ. Res.*, **25**(2), 149-171.
- Pini, B. (2009). Australian rural local governments and environmental sustainability: An evaluation of progress. *Aust. J. Publ. Admin.*, **68**(2), 182-193.
- Powell, W.W. (1991). Neither market nor hierarchy: Network forms of organization. *Res. Organ. Behav.*, **12**, 295-336.
- Schofield, J. (2001). Time for a revival? Public policy implementation: A review of the literature and an agenda for future research. *Int. J. Manag. Rev.*, **3**(3), 245-263.
- Stoker, R.P. (1991). Reluctant Partners: Implementing Federal Policy. University of Pittsburgh Press, Pittsburgh.
- UNDP (2007). Supporting capacity development: The UNDP approach. United Nations Development Programme, New York.
- Wakely, P. (1997). Capacity building for better cities. DPUNNEWS, Journal of the Development Planning Unit, <http://www.gdrc.org/uem/capacity-build.html>, visited 14 April 2011.
- Winter, S. (1999). New directions for implementation research. *Policy Currents*, **8**(4), 1-5.
- Yin, R.K. (2003). Case Study Research: Design and Methods. Sage Publications, Thousand Oaks, California.