

QUEENSLAND'S COASTAL MANAGEMENT: INDICATORS TO MEASURE COASTAL GOVERNANCE OUTCOMES

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ABSTRACT

Using South East Queensland (SEQ) as a case-study, this paper examines the transition in Queensland's coastal governance system, evaluate its' performance against a set of internationally derived Integrated Coastal Zone Management (ICZM) governance indicators. In the SEQ case-study, the plans and policies will be analysed against indicators to assess governance performance in the area of participation – a challenge for coastal managers seeking to measure success of the progression through the ICZM cycle, rather than simply measuring input-based results. The indicators enable success to be measured 'on the ground' as outcomes and impacts on the environment, industry and communities. The results should reveal the strengths and weaknesses of participation methods used in the preparation of available planning instruments modifications needed to achieve best practice. The issues faced by Queensland are similar to those being experienced in many countries as we experience a major shift in philosophy – moving from government to governance in managing environmental or common pool resources, applying new modes of policy implementation in which government manages in partnerships with industry and communities. This paper focuses only the document analysis of the scope and extent of public participation in Queensland's coastal planning process as a demonstration of how indicators are applied to evaluate Queensland's performance against ICZM governance principles.

1. BACKGROUND: SHIFTS IN COASTAL GOVERNANCE

Planning and management of the coastal zone has unique challenges because of the complex interactions between terrestrial and marine environments. . Implementation of the Integrated Coastal Zone Management (ICZM) concept can result in a governance system that is capable of managing multiple uses in an integrated way through the cooperation and coordination of government agencies at different levels of authority including different economic sectors and communities (Ehler 2003; Lane 2006). Coastal governance has to accommodate diverse, complex, dynamic and vulnerable systems, where a simple solution or a single management action is insufficient to deal with complex social-environmental issues known as 'wicked problems' (Rittel & Webber 1973). Nearly all public policies have to deal with 'wicked problems' that are inherently difficult to define, complex in nature, symptomatic of other problems, and for which there is no immediate or ultimate solution since any solution will generate further consequences to deal with (Head 2009; Rittel & Webber 1973).

Therefore, new forms of societal governance and changes in ways of living are required to resolve wicked problems, especially in natural resource management policy arenas (Brown et al. 2010; Jentoft & Chuenpagdee 2009; Lockwood & Davidson 2010). The necessity for a major shift 'from government to governance' in the trend of environmental policy also results in new possibilities for policy implementation ranging from the use of economic instruments and regulation through to community and business initiatives (Lane, Taylor & Robinson 2009; Lockwood et al. 2010; Voogd & Woltjer 2007). The meaning of 'governance' is not synonymous for 'government', according to Rhodes (1996, p. 652), "*Rather governance signifies a change in the meaning of government, referring to a new process of governing; or a changed condition of ordered rule; or the new method by which society is governed*". According to Burroughs (2011, p. 15) "*...coastal governance is not the purview of government alone and governance includes arrangements and mores that structure*

resource use, problem analysis, acceptable behaviour and sanctions'. The recognition and contribution of informal organizations, civil society and actors need to be addressed while policy making. For the purpose of this study, the term 'coastal governance' refers to the structures (formal and informal arrangements, institutions) and processes used to govern behaviour of the stakeholders, both public and private, in the coastal area and the resources and activities it contains.

A new shift is also being observed from traditional governance pattern in which governing works as '*one-way traffic*' towards a '*two-way traffic*' model where both the governing system and system to be governed are concerned (Kooiman 2000), e.g. fisheries and coastal governance may be seen as a relationship between two systems that could be termed a '*governing system*' and a '*system-to-be-governed*' (Jentoft 2007). In other words, the strengths and weaknesses of both are considered in the new governance approach to manage complex socio-ecological systems. A comparison between traditional and new modes of coastal governance has been shown in Table 1. The new governance approach may also institutionalize and legitimate the conflicts among multi sectoral policy domains of traditional governance and reinforce an integrated approach (Peters 2000).

Table 1: The comparison between traditional and new mode of governance

The traditional coastal governance	New mode of governance
<ul style="list-style-type: none"> ▪ The governing system is command and control based; one-way traffic. ▪ The governed are in the secondary position; the governing system is hierarchical and strict. ▪ Poor communication with the stakeholders, "Top-down" planning. ▪ Little or no scope for stakeholder participation ▪ There is clearly defined boundary between the authority and the governed. ▪ Policies, goals are always within the authority of the governance system. ▪ In a word, this system is unitary, single-minded, top-down and instrumental. 	<ul style="list-style-type: none"> ▪ Governance is observed as an open system: interacting with and depending on its surrounding environment; two-way traffic. ▪ The system consists of a heterogeneous network of powerful stakeholder groups. ▪ The composition of stakeholder groups and their individual goals are not imposed and rigid. ▪ "Bottom-up" planning approach. ▪ There is wide scope for negotiation, compromise and consensus building. ▪ This governance system is principled, bottom-up, interactive and multi-stakeholder driven.

Source: Adapted from Jentoft (2007); (Kooiman 2000)

2. ROLE OF INDICATORS IN EVALUATING COASTAL GOVERNANCE PERFORMANCE

The 2002 Ottawa international workshop on 'The Role of Indicators in Integrated Coastal Management' reviewed the status of indicators to monitor the efficiency of the ICZM programs and developed a common framework template for the selection and application of indicators in different situation by examining a selected number of case-studies (Belfiore 2003). Though implementation of the ICZM principles necessitates some modifications to statutory planning and policy-making process to achieve ICZM goals, in reality, there is a wide 'implementation gap' and many laws, policies, regulations, plans are only valuable documents which are not implemented effectively (Olsen 2003). No single or set of indicators can be applied for all purpose, rather indicators may be tailored according to the environmental, socio-economic and governance context in which they are to be applied (Belfiore 2003; Ehler 2003; Henocque 2003; Olsen 2003; Olsen, Lowry & Tobey 1999; Pickaver, Gilbert & Breton 2004).

The use of governance performance indicators is still in its infancy (Belfiore 2003) and is still a great challenge for coastal managers seeking to establish suitable measurement systems to evaluate the performance of ICZM governance (Ehler 2003). These indicators should be able to measure the progression according to the ICZM cycle rather than simply record input based results (Pickaver, Gilbert & Breton 2004). Success should be judged 'on the ground',

as outcomes and impacts (Ehler 2003). The wider study on which this paper is based, evaluates the appropriateness and effectiveness of coastal governance in SEQ by applying the governance performance indicators derived from this comprehensive literature review (Breton 2006; Ehler 2003; Lane 2006; Pickaver, Gilbert & Breton 2004); Table 2 presents a list of indicators for evaluating governance performance in the integrated management of coastal resources and environments in SEQ.

Table 2 Indicators of ICZM governance performance

Phase or stage	Governance components	Indicator of output or outcome
Initiation	Authority	<ul style="list-style-type: none"> ▪ Enabling legislation, policy or strategy ▪ Leaders of constituency groups identified and developed ▪ A stocktake of the coast (identifying who does what, where and how) has been carried out ▪ Local stakeholders have influence and control over ICZM regime that has legal basis
	Institutional capacity	<ul style="list-style-type: none"> ▪ Interagency steering/coordination group established ▪ Scientific/user advisory groups established ▪ Initial partnerships formed ▪ Training courses held for public officials ▪ Authority and roles identified for different levels of government and stakeholders ▪ A stocktake of the coast (identifying who does what, where and how) has been carried out ▪ Consistency among actions at various levels of government (national, regional, local) ensured
Planning	Planning capacity	<ul style="list-style-type: none"> ▪ Problems identified, analysed and ranked ▪ Management boundaries defined ▪ Clear and realistic goals/targets identified and ranked ▪ Measurable management objectives specified ▪ Alternative management strategies identified and analysed ▪ Selection criteria for management strategies specified ▪ Ability to be adaptive and react to unpredicted change (e.g., climate change) established ▪ Collaborative, participatory and transparent planning processes adopted
	Public participation	<ul style="list-style-type: none"> ▪ Collaborative, participatory and transparent planning processes adopted (some delegation of power, informal strategies) ▪ Legal basis for local stakeholders to have influence and control over ICZM regime ▪ Stakeholders actively participate in regular planning meetings/working ▪ Effective stakeholder participation in all phases of planning ▪ recognition and contribution of informal organizations, civil society and actors need to be addressed while policy making
Adoption	Formalisation and support	<ul style="list-style-type: none"> ▪ Legitimate authority(s) agreed to adopt plan of action ▪ ICZM program integrated into national environmental management and sustainable development programs ▪ Plan of action endorsed by constituencies and users
Implementation	Enforcement capacity	<ul style="list-style-type: none"> ▪ Clear authority provided to write/enforce regulations to change behaviour ▪ Diverse activities among institutions and projects are effectively coordinated ▪ Appropriate compliance monitoring program in place ▪ Appropriate penalties assessed and collected for non-compliance - enforcement
Monitoring and evaluation	Monitoring capacity	<ul style="list-style-type: none"> ▪ Appropriate management performance monitoring is operational
Adaption and reformulation	Evaluation capacity	<ul style="list-style-type: none"> ▪ Evaluation of success/failure of management action fed back to planning ▪ Evaluation results used and fed back in management and planning decision

Adapted from Breton (2006), Ehler (2003), Lane (2006), Pickaver, Gilbert and Breton (2004)

3. METHODOLOGY

The paper is based on document analysis of South East Queensland's (SEQ) coastal planning and governance documents and analysis of documentation and plans of two regional case-studies: Sunshine Coast Regional Council and Gold Coast City Council. In all cases, success towards achieving ICZM goals will be assessed in relation to public participation. This study constitutes only a part of my research and will contribute to the final findings of my research that includes in-depth interviews with planners and other stakeholders involved in Queensland's approaches to coastal planning.

A participatory approach involves broader interests, representative of the community and reduces the conflict while increasing the possibility for successful policy implementation.

Successful implementation of ICZM has been so difficult despite being adopted by many countries, because of the lack of communication among policy-makers, scientist, social science and civil society (Mette 2011). Local Agenda 21 stresses the need for community participation towards integrated management and sustainable development (UNCED 1992). One of the basic requirements for successful ICZM is enhancing the involvement of the community to improve resource management and increase its acceptance (EC 2007; Kay & Alder 1999). According to Conroy and Berke (2004), *'Informed participation in decision-making institutions that affect people's lives, such as long-range-comprehensive planning, is at the root of civic democratic practice and therefore sustainable communities'*. Variety of tools for communication, such as, communication of complexity, communication of information about transformation (change management), science communication, risk communication and sustainability communication need to ensure active and participatory dialogue for active participation of stakeholders (Mette 2011).

The scoring system for evaluation adapted is a basic Likert scale from 1 to 7. The scoring system used to carry out the performance evaluation of public participation in Queensland's coastal planning process is shown in Table 3. This is also informed by Arnstein's ladder of citizen participation (Arnstein 1969). This evaluation will show the level of public participation in the decision-making process to determine the effectiveness of the system and also identify any gaps.

Table 3 The scoring system

Score	Meaning for assessing participation
0	No participation – ICZM issues and problems, and the plan/policy developed by only by experts based on their observations.
1	Legal requirement for participation based on "comment and review" ¹ – no additional community input sought, compliance with requirements of formal authority but little additional consultation has been undertaken
2	"Comment and review" participation style and consultation with parties as required in the relevant legislation and regulations
3	"Comment and review" and relevant ICZM related public meetings and workshops with stakeholders
4	"Comment and review" along with other participation methods to analyse expert prepared plans/policies; evidence of policy/plan change resulting from participation as ' <i>one way traffic</i> ' information flows
5	"Comment and review" with evidence of participation throughout the ICZM related plan or policy preparation process, meetings with a range of stakeholder groups ' <i>two-way traffic</i> ' model of information flows in final parts of process – not earlier stages.
6	"Comment and review" with evidence of participation requirements throughout the whole planning process, reports about submissions, discussion about potential delegation or transfers of power, legal basis for the stakeholder involvement throughout the plan/policy preparation process, information about acceptable behaviours as ' <i>two-way traffic</i> ' model of information flows
7	"Comment and review" requirements met with complete transparency about effect of participation (e.g. changes to policy/plan) and some transfers or delegation of power, recognition and contribution of informal organizations, civil society and actors are addressed while policy making i.e. ' <i>two-way traffic</i> ' model of information flows

4. TOWARDS ICZM: THE QUEENSLAND COASTAL POLICY FRAMEWORK

The Queensland Coastal planning and management regime is going through a transition. Since 2002, the State Coastal Management Plan (SCMP) has guided coastal planning and development in Queensland. However, the 2009 statutory review of SCMP (s42, CPMA 1995) indicated a number of areas in which SCMP has not been effective and it was identified as 'a significant stumbling block for the progression of the ICM in Queensland' because of its ambiguity to guide local planning schemes and powerlessness to prevent inappropriate development (Lazarow et al. 2009). The new 2011 Queensland Coastal Plan (QCP) will replace the SCMP and all current regional coastal management plans. Queensland coastal planning and management is carried out under the provisions of the *Coastal Protection and Management Act 1995* (CPMA) and other related legislation. The State level QCP was announced in April 2011 and will come into effect by 2011. The QCP provisions consist of two parts (DERM 2011):

¹ "Comment and review" the basic consultation method required in all ICZM relevant legislation in Queensland.

- i. The State Policy for Coastal Management (management policy) provides guidance on managing and maintaining coastal land activities where the development does not constitute under SPA 2009. Preparation and implementation of coastal management plans, including shoreline erosion management plans come under this policy.
- ii. The State Planning Policy (SPP) for Coastal Protection (planning policy), directs development that constitutes under SPA 2009, and contains policies, criteria and maps. It is directed at planning and development outcomes in the coastal zone.

The Department of Environment and Resource Management (DERM) is responsible for the implementation of the QCP and is a concurrence agency or assessment manager under the SPA's integrated development assessment system (IDAS) for assessable development that may affect coastal resources in the coastal management districts (DERM 2011). Figure 1 demonstrates the variety of legislation, policies and plans relevant to achievement of ICZM in SEQ.

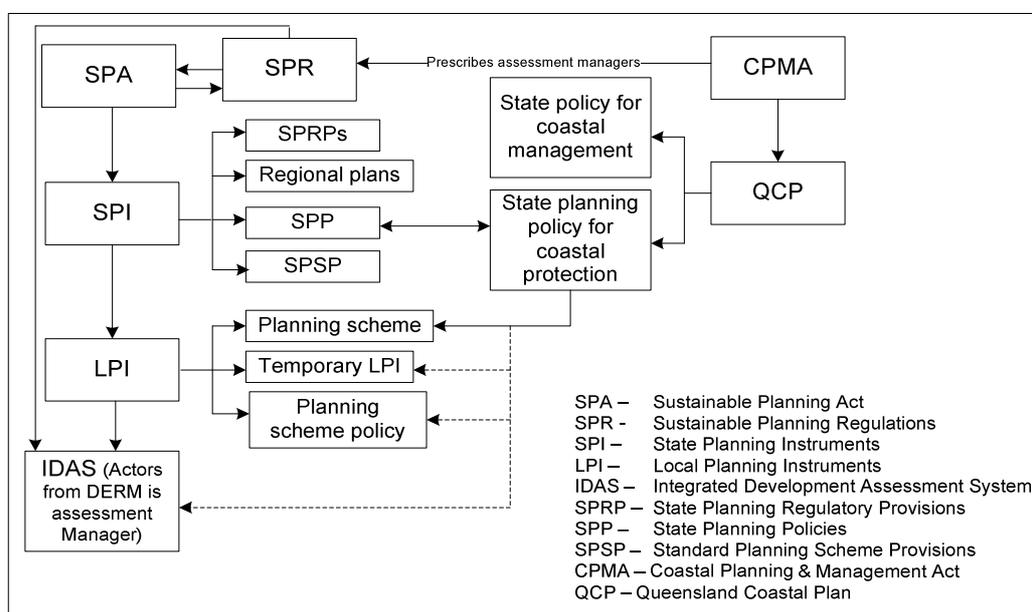


Figure 1 Relationship between CPMA and SPA regimes

5. STATUS OF PUBLIC PARTICIPATION IN QUEENSLAND'S COASTAL PLANNING

The scope for stakeholders to be involved in defining issues and problems which should be addressed in Queensland's current coastal planning regime is difficult to identify only through document analysis. Interviews with coastal planners and managers will provide additional data which will be combined with this analysis to reach final conclusions about the effectiveness of participation in ICZM planning. The statutory requirement for participation in preparation of Queensland's SCP is based on the idea of 'comment and review'. According to s27 of CPMA, 'after considering each submission, the Minister may (a) make the coastal plan as provided for in the draft plan; or (b) make the coastal plan as provided for in the draft plan with amendments the Minister considers appropriate'. DERM has published a consultation report² summarizing statements and changes that basically give the information on percentage of submission methods and a superficial idea on the changes made based on

² QCP consultation results available online at http://www.derm.qld.gov.au/coastalplan/consultation_results.html

the submissions have been made. In addition it can also be argued that the 2009 statutory review of the previous state ICZM policies would have informed the preparation of the draft QCP. However, on the basis of criteria outlined in Table 3, the score for participation in preparing the QCP is 1 or 2, depending on how much weight is placed on the results of the statutory review.

The ongoing involvement of different councils and groups at the State level coastal planning process of Queensland is also unsure. The Coastal Protection Advisory Council (CPAC) was established under the Coastal Act, but abolished in 2009 after the review of SCMP. The Local Government Association of Queensland (LGAQ) is an advisory body. LGAQ has an existing policy on coastal management that encourages local government participation in the implementation of the coastal plan. It has also established Taskforce (C-CAT)³ to provide expert guidance to the councils and their communities regarding planning and land use issues associated with climate change under the new Coastal Plan. The Queensland Coastal Councils Group (QCCG) supports Queensland councils who manage coastal areas. The QCCG is open to any local government officer or councillor who is involved in management of the coastal zone. The Queensland Branch of the Australian Coastal Society (QACS) formed in August 2010 may also be a useful source of support to councils. The mission statement of QACS is to be the recognised voice for the Queensland coast, improving coastal outcomes through knowledge sharing, capacity building, networking and advocacy. However, at this point, those potential opportunities to involve other experts and communities do not change the State level score in terms of participation.

The scope of participation in the preparations of Queensland's planning schemes is greater than for the preparation of State level documents. S118 of SPA (2009) requires that local government publish the announcement to commence the process by providing a statement of proposal for a local planning scheme/policy. The Sunshine Coast Regional Council (SCRC) has proposed new planning scheme in 2011 by publishing the document '*Planning for a Sustainable Sunshine Coast*' and during the consultation process council officers spoke personally to more than 5,000 people at a range of forums including 35 staffed displays, meetings with community groups and peak bodies (SCRC 2010). The second phase of consultation has taken place at more local level to gain and understanding of the strength and weakness of the existing planning schemes. A community focus group and an industry focus group were formed to exchange knowledge and to provide input into the planning scheme development. The score for public participation is 3.

The Gold Coast City Council (GCCC) has also announced the statement of proposal for new planning scheme named 'Bold Future Planning Scheme' and made it public for consultation. The consultation activities include the 'Bold Future Planning Scheme' website discussion forum, two industrial open days to provide the opportunity to ask questions, raise issues and talk to council officers about issues relating to the statement of proposal (GCCC 2011). The score for participation is 3. Even though the scope for public participation in local planning schemes are higher than the state planning schemes, there is no evidence of policy/plan change resulting from participation as '*one way traffic*' information flows.

6. Conclusion

The preliminary analysis shows that the coastal planners and managers operating at the regional level of planning in Queensland have a better understanding of techniques to involve community in planning throughout the process. However, it could also be argued that the variety of legislation that affects ICZM policy at the State level is focussed on the more public aspirations for ICZM and needs to be developed beyond parochial visions of

³ http://www.lgaq.asn.au/web/guest/news/-/asset_publisher/pG32/content/taskforce-to-help-councils-deal-with-risk-of-climate-change?redirect=%2Fweb%2Fquest%2Fnews accessed in May 25, 2011

regional/local communities. It is hoped that interviews to be carried out in the next few months will indicate why there are limitations on participation at a State level of planning. The ICZM governance indicators used for evaluating the status of public participation in this paper shows the importance of evaluating performance in each stage of ICZM governance and planning. It reinforces the status of ICZM governance performance and increases the transparency of the planning process. Strengths and weaknesses in the process are identified and ideas may be suggested for continuous improvement – this improving the potential success of the plans and policies.

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