

## Improvements to Integrated Coastal Zone Management on Australia's Gold Coast Integrating coastal planning and engineering in local government

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### ABSTRACT

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Gold Coast City Council is one of the largest local governments in Australia with a staff of approx 2800. The City includes over 50 km of open coastline and over 600 km of waterways. Given the city's position as an international coastal destination it is important that the values of these environments that attract residents and tourists are managed and protected.

Integrated Coastal Zone Management requires people that can work across many disciplines. Recent projects and roles developed within Gold Coast City Council are presented as an example of ways that one local government is addressing the complexity of ICZM.

Case studies exploring the Gold Coast Ocean Beaches and Foreshores Strategy and the role of the Beaches and Waterways Development Officer describe the ways in which the local coastal management issues are being integrated across a large organisation, across varying disciplines and different levels of government.

Both examples are measured against the barriers to successful coastal policy making as described in a theme report following the Coast to Coast Conference (Australia's national coastal conference) in 2002. The major barriers discussed include; lack of integration, lack of adequate monitoring of policy implementation and review, lack of resources for both policy making and the information base is either inadequate or drawn from a narrow range of sources.

**ADDITIONAL INDEX WORDS:** *Coastal planning, Coastal Engineering, Continuous Improvement*

### INTRODUCTION

The City of Gold Coast spans across 1402 square kilometres, with 70 kilometres of coastline ranging from undeveloped sand islands within a Marine Park, to some of the most intensely urbanised coast in Australia.

Gold Coast City Council (GCCC) is the second largest local government authority in Australia with approximately 2800 staff. The organisation is divided into 7 separate directorates with various functions. Each of these directorates has core responsibilities that relate to, or influence coastal management practice within the Local Government Area.

With so many distinct and discrete parts of the organisation participating and influencing the management of coastal resources and assets, barriers to integrated coastal zone management have formed.

Following on from the Coast to Coast 2002 Conference, MIDDLE (2004) has described a list of thirteen barriers to successful coastal policy making.

A review of those involved in coastal management on the Gold Coast has highlighted four significant barriers to successful coastal management activities as being;

- Lack of integration
- Lack of adequate monitoring of policy implementation and review
- Lack of resources for both policy making and implementation
- Information base is either inadequate or drawn from a narrow range of sources.

Gold Coast City Council has developed initiatives and provided resources in an attempt to address these barriers. Two examples of continuous improvement in coastal management on the Gold Coast are described.

### CONTINUOUS IMPROVEMENT

Gold Coast City has a long history of planning, designing and implementing coastal management works (BOAK et al 2001,

STUART and TOMLINSON 2004). This section provides two new examples of adaptive management in action.

### **Description of the Ocean Beaches and Foreshores Strategy**

It is the aim of the Ocean Beaches and Foreshores Strategy (OBFS) to create a shared vision and strategic plan that collectively manages and plans for the short, medium and long-term future of Gold Coast City's ocean beaches and foreshores. Council would then use the plan, in collaboration with other agencies (such as the Queensland Environmental Protection Agency), to address beach and foreshore issues.

It is a way of articulating and endorsing the value that the Gold Coast community places on its beaches and developing strategies to protect those values. The OBFS will define and document a shared vision of how we want our beaches to look and function into the future.

The OBFS consists of five major themes including beach usage, the sandy beach environment and its management, foreshore park development and management, community values and involvement and the economic value of beaches.

This provides the strategy with adequate scope to address environmental, social and economic issues.

### **Description of the Beaches and Waterways Development Officer Role**

Recent growth in the south-eastern corner of Queensland has been very rapid and placed an increased burden on Councils to provide for the needs of their new communities. THOM and HARVEY (2000) stated, "This growth, particularly in southern coastal Queensland and northern coastal New South Wales, will generate strong pressures for land rezoning, new development applications and degradation of scenic and natural heritage values."

In recognition that greater integration was necessary to satisfy the expectations of both Council and the general community, two directorates within GCCC have sought to improve the provision of integrated coastal management across the City. The Engineering Services (ES) and the Planning, Environment and Transport (PET) directorates have formed a partnership through the creation of a position specifically designed to provide greater integration, review and monitoring of coastal policy and decision-making. The Beaches and Waterways Development Officer position was created in March, 2005 to provide a mechanism for ES (as the asset owner), to assist in the decisions made by the PET directorate (the approval agency).

The primary role of the position is to provide a mechanism for better coastal outcomes through the development assessment process and to have input into the strategic management of the City's coastal resources.

### **BARRIERS TO BE ADDRESSED**

Specific barriers are discussed in this section and examples are provided to show how the projects mentioned above are addressing the barriers.

While the barriers are discussed in isolation below, it is important to remember that there is a large amount of interaction between them. These barriers have not been addressed separately in practice.

### **Lack of integration**

"One of the most commonly cited deficiencies of current arrangements is a lack of integration and coordination." (DOVERS and LAZAROW, 2006)

### **OBFS**

GCCC has a series of Local Area Plans that cover specific beach locations but there is no document that looks at all of the City's beaches as a single unit. Many stakeholders across the varying functions of Council have been involved in the early stages of the OBFS development.

This strategy will build on the basic coastal values identified in the Queensland State Coastal Management Plan (EPA, 2001) and the South East Queensland Regional Coastal Management Plan (EPA, 2006).

Through a detailed engagement process including stakeholder visioning workshops, in-depth interviews, public meetings, market research, peer review and a public exhibition period of the draft document the OBFS will feed information into other planning processes such as state of the environment reporting, corporate performance reports and the development of strategic documents such as the GCCC Nature Conservation Strategy, GCCC Local Growth Management Strategy, and various Recreation, Tourism and Events strategies developed by GCCC.

In addition to these GCCC corporate priorities the OBFS will help to implement state planning policies such as the State Coastal Management Plan at a local Gold Coast level. Also, the OBFS will complement the National Cooperative Approach to Integrated Coastal Zone Management recently released by the Federal government.

### **BWDO**

Within GCCC, the Engineering Services directorate is the asset owner and manager for coastal assets that are contributed through development. Engineering Services is also responsible for implementing a capital works program for coastal assets and natural systems within the coastal environment. The Planning Environment and Transport directorate assess development applications and sets strategic direction for development and local area management.

Due to the size and complex structure of these directorates, over time management efforts to ensure good coastal outcomes have become duplicated, conflicting in nature and in some instances poorly actioned. Attempts to improve integration were further hindered by poor communication and an understanding of business process across directorates.

Recognition of these problems and a willingness to improve the situation enabled the directorates to partner in developing a solution. In order to understand and facilitate the core business activities of ES, and to appreciate the legislative requirements and work process of PET, a series of new positions were created that were sponsored by ES and embedded within PET. This arrangement has facilitated greater integration and awareness of directorate issues relevant to the management of coastal landscapes and assets.

### **Lack of adequate monitoring of policy implementation and review**

### **OBFS**

As well as a large community engagement focus, the OBFS has an internal focus looking at how GCCC can best implement its coastal management activities within a large and diverse

organisation. This is aimed at addressing the concerns of appropriate policy implementation.

Given the multi-disciplinary and cross-directorate nature of this project there is a significant role in co-ordinating the activities of many different players. The main value of this project will be in ensuring that all sections of the value chain understand how their activities contribute to the overall improvement of the beach management service GCCC provides to the community.

A detailed implementation plan in conjunction with a working group that involves the key players from each directorate will ensure adequate monitoring of the OBFS implementation. Funding provided to the different sections responsible for implementing the OBFS will be dependant on proven record of successful implementation.

A review period of no more than five years is built into the OBFS process to ensure the continuing relevance of the document and related actions. This approach is strongly supported by LAZAROW et al (in press) who state that unlocking the potential of strategic planning can be done by "embedding it within the structure and process of a council's core business by tying planning to the electoral cycle, budgeting, asset management and capital works program."

## **BWDO**

The GCCC Planning Scheme is the central document that prescribes how the City will grow. The Scheme sets limits on the density and preferred location of development along oceanfront, canal fronting and waterway fronting sites. While the Planning Scheme is periodically updated, with comments being sought across directorates, PET implements the Scheme. Inadequate input and discussion during reviews of the Scheme and associated supporting policies, has seen varied expectations of Planning Scheme output across the organisation.

The Beaches and Waterways Development Officer position facilitates input from all directorates on expectations of how the Planning Scheme will develop sustainable coastal management outcomes. The BWDO position also provides a valuable conduit for discussion and refinement of how policy is implemented and if it is meeting the expectations of various Directorates across Council. A significant component of this role is to review existing procedures, policies and strategies that relate to coastal management and to recommend and implement improvements.

## **Lack of resources for both policy making and implementation**

As one of the largest local governments in Australia, GCCC has considerable capacity to undertake major coastal works. STUART and TOMLINSON (2004) indicate that GCCC spent approximately \$12M in 2004/05, while GCCC records show that the value of the beach assets owned by Council was \$47M.

It should be noted that while there may be more resources available within GCCC compared to many other local government areas, there are increased pressures on coastal resources within the Gold Coast. In addition to a residential population of approximately half a million people, the Gold Coast hosts 80,000 visitors each day and 22.9M visitor nights each year (GCCC, 2006).

## **OBFS**

The OBFS represents a significant investment of resources into coastal planning and policy making on the Gold Coast. To date no policy document has existed that tries to address the management of the beaches of the Gold Coast in a holistic manner. Policies

currently exist for specific issues such a dune management, foreshore rock wall design and construction and an oceanfront land code within the planning scheme. The OBFS is a new strategic document that provides a framework for existing and new coastal policies to meet the needs of the city. Effective engagement in the development of the strategy will engender greater ownership from the stakeholders, leading to stronger connections to politicians that make decisions on funding coastal projects at all levels of government.

The provision of a full time project manager to develop, implement and review the strategy and coordinate coastal activities is also an increased investment into coastal policy making for GCCC.

## **BWDO**

The amount of growth and investment into the Gold Coast has generated a significant workload for GCCC. This level of work, combined with a shortage of experienced engineers and planners in the current Australian work and economic environment, have made it difficult to attract and retain staff. A high turnover of staff has in some instances led to a reduction of internal capacity to recognise potential for conflict across directorates.

The creation of the BWDO position has provided a way to bring increased attention on improving business processes and decision-making. The position can act as a facilitator between directorates and into the community to ensure that greater integration is achieved for strategic planning and development issues. This greater integration and increasing awareness has led to better outcomes for the City's coastal assets. The dedication of a full time officer to this role is a significant increase in resources allocated to ICZM by Gold Coast City Council.

## **Information base is either inadequate or drawn from a narrow range of sources**

Previous coastal management efforts on the Gold Coast have focussed on coastal engineering works to address beach erosion (BOAK et al, 2001). Planning activities for land use in the coastal zone have also occurred but often the planning and engineering solutions have been developed in relative isolation or with poorly defined ways of recording how the solutions impact on other areas within GCCC.

## **OBFS**

Like many similar large organisations, GCCC has specific directorates that focus on major functions such as planning, engineering, marketing, community services etc. The OBFS provides a system to coordinate the beach related activities across these different functions. A peer review group has been developed that includes senior officers from all directorates, compromising many different skill sets, experiences and backgrounds. This has ensured input from a wide array of information sources is gathered.

The themes of the OBFS mentioned above provide enough scope to integrate the many different areas important to coastal management at a local scale. Issues relating to infrastructure and erosion risk are addressed through the Gold Coast Shoreline Management Plan, which is a sub project of the OBFS. Planning issues for the coastal zone will be integrated in the Local Growth Management Strategy for the city. Recreational issues related to the management of foreshore parks and beaches are being addressed and the impact of tourism on the beach and the city's economy is also considered.

The OBFS forms a key component of GCCC's Sustainability Agenda that addresses the needs of the growing community from a triple bottom line perspective. The detailed and inclusive consultation methodology for developing the OBFS means that many different areas of expertise will influence the vision for the future of Gold Coast beaches. This consultation will include a marketing campaign to increase interest in and awareness of the project.

### BWDO

The size and spatial distribution of the ES and PET has led to an 'insulation' of internal issues and business practices. This insulation of knowledge, experience and awareness of cross directorate objectives and philosophies, has led to a reduction of internal capacity within directorates to achieve integrated coastal management outcomes.

The Beaches and Waterways Development Officer position has allowed issues of importance to be promoted across work areas, ensuring that information is shared and made accessible. This has allowed the information base related to coastal management practices and policies to be viewed by a larger audience within the organisation.

### CONCLUSION

The beaches and waterways of the Gold Coast play a significant role in the lifestyle, economy and well being of the City's residents and tourists. GCCC has a long history of actively managing its coastal environment.

The OBFS and the BWDO position are seen as two examples of how a local government is attempting to improve ICZM. Problems with poor integration have been resolved through undertaking projects and creating positions that engage a wider audience and encourage increased participation in coastal management activities. Improvements in any areas of coastal management activities are realised not only by sound planning, but through a combination of acceptance and consensus of all stakeholder

groups, with appropriate opportunities for policies and practices to be reviewed.

The improvements to ICZM on the Gold Coast described in this paper are relatively new interventions. Initial reviews of those involved suggest a positive impact, however, not enough time has elapsed to allow a full review of their impact.

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