

Shoreline Management Plan Ecological Processes

Information Sheet, May 2007

What is the Gold Coast Shoreline Management Plan (GCSMP)?

The GCSMP, which commenced in 2005, is a 3-year program aimed at improving our understanding of our beach environments. The GCSMP focuses research and planning on how we manage our beaches and shoreline. The management plan includes ecological processes, community values and stakeholder involvement, physical processes, beach management and the economic value of beaches.

Ecological processes

The ecological component of the GCSMP focuses on sandy beach environments. Current management of beaches has been mainly centred on physical aspects such as sand supply, stability and erosion interventions. As we face new challenges such as climate change we believe that the sustainable management of sandy beaches requires an integrated approach that also encompasses the ecological values of these crucial ecosystems.

Why are our beaches important?

Gold Coast City's ocean beaches are its most recognised icon and a fundamental lifestyle asset of the city. Beaches underpin much of the area's economy, they provide much needed recreational amenity for the city's rapidly growing population and are the single most important asset supporting tourism. Wide beaches with healthy dune systems help combat erosion and protect adjacent public and private property. Sandy beaches provide habitat for numerous plants and animals. Beaches are not ecological deserts - a popular misconception. By contrast, sandy beaches harbour unique and diverse species not found in any other marine habitat. The surf zones of beaches are important nursery and recruitment areas for fish that rely on the smaller invertebrates as a supply of food. Beaches also act as enormous sand filters and thus supply ecosystem services such as nutrient processing. Moreover, beaches are an important ecosystem that links the ecology of sand dunes, intertidal zones, the surf zone and nearby rocky reefs.

What are we doing?

As part of the ecological component of the GCSMP we are gathering information on all scientific studies that have taken place on Gold Coast beaches, reefs and sand dunes. This information will help us to understand the environmental condition of these environments and will help us identify areas that need research or are under threat from natural or man made activities.

Future actions

We hope to conduct research on biological aspects of our sandy beach environments. This data will be then combined with information on physical aspects (e.g. erosion, sea level rise), human uses and the economic value of beaches. As a result of this project, data on a range of factors will be made available to the general public and decision making authorities. This information could lead to management decisions which take into consideration a range of aspects and as a result, contribute to the sustainable development of our coasts.

Community awareness

In order to raise awareness about our coasts, marine life, beaches and associated fauna we hope to involve the public in the data collection and field work related to the biological research to be undertaken in the area. In this way we expect to provide opportunities and resources for volunteer community groups to directly participate in scientific projects and as a result directly contribute to the management of their local area.

How do I get more information?

More information is available online at:

Gold Coast Shoreline Management Plan
www.griffith.edu.au/centre/gccm/gcsmp

Or contact:

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References

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