

CONSULTANCY BRIEF

PROJECT NAME: Plan of Management St Huberts Island Drainage Reserves (Canals)

FUNDING 61001.018.506

PROJECT LOCATION: St Huberts Island Drainage Reserves (Canals).

IR 9778767

PROJECT DETAILS:

Aim

To provide a Plan of Management (POM) to enable residents and Council to conduct maintenance activities including dredging within the St Huberts Island Canals. The POM will allow activities to protect and restore foreshores, seawalls and canal depths in a manner that will not adversely affect the hydraulic, sedimentary or ecological processes occurring within the canals, foreshores and the surrounding water body (Brisbane Water).

The POM will also specify the minimum requirements for seawalls and boat ramps for when they are constructed, replaced or repaired.

The proposed POM will be used in conjunction with GDCP 2013 Chapter 3.16 Water Recreation Structures (attached).

When completed, the POM will provide Council, residents and contractors information to conduct activities associated with improving the condition of the canals and structures within and surrounding the canals without breaching environmental guidelines.

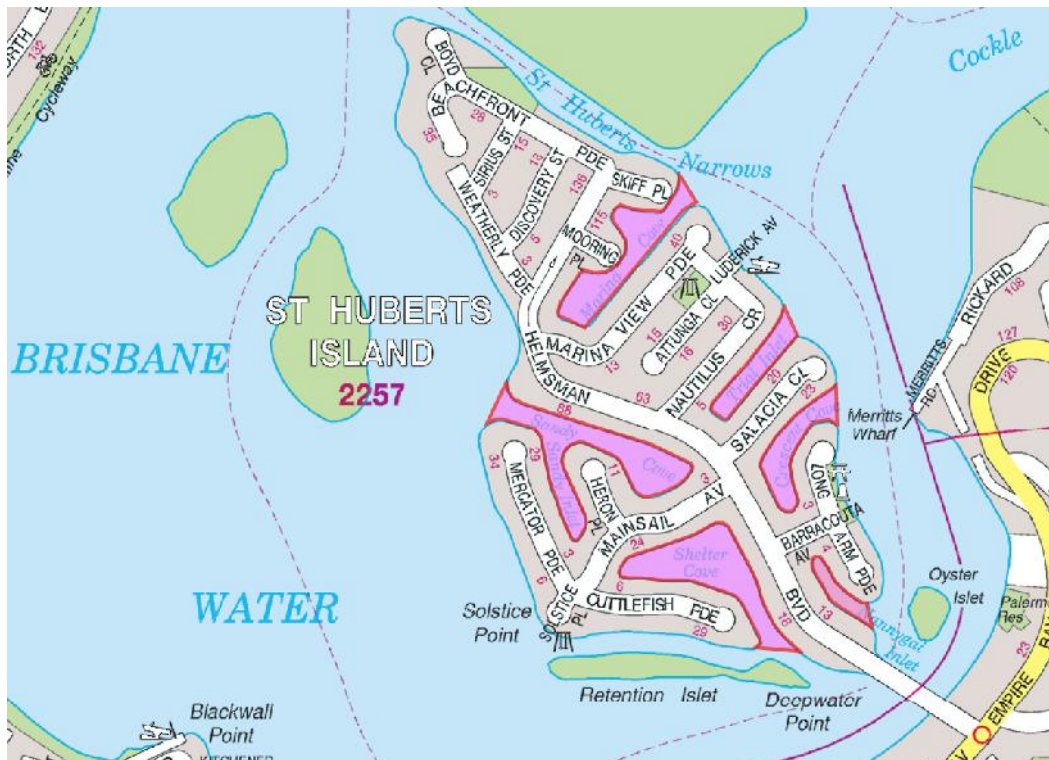


Figure 1 – Locality of drainage canals highlighted

Background

The St Hubert's Island canals are drainage reserves and are under the control of Councils Construction Planning and Operations Service Unit.

In 1997 a St Huberts Island Drainage reserve task group with Island resident representation was formed and their investigations resulted in a document titled 'Recommended Guidelines for Plan of Management for the drainage reserves of St Hubert Island' (GPoM).

The document contains extensive details of the type of development allowed in the canals. Using this information, Development Control Plan No 145 'Mooring Facilities on St Huberts Island' (DCP145) was produced and certified in 2000.

However some of the work activities recommended in the GPoM were not included in DCP145

Recommendations in the GPoM not included in DCP145

The GPoM recommended what canal maintenance works were to be carried out by Council, residents and/or their contractors. It listed the following work activities to be conducted within the canals:

By Council

1. All sand movements within the canal area shall be subject of a professional investigation and report by an adequately qualified consultant.
2. Dredging of the drainage reserves to restore design or minimum depth for boating in such drainage reserves.
3. Sand nourishment of eroded shorelines.

By land owners and / or their contractors:

4. Maintenance and repair of the sea-walls
5. Maintenance and repair of the boat ramps

For Council and residents to carry out works within the canals in an environmentally responsible manner, especially dredging and filling, it was recognised that the services of a Coastal Engineer will be required as recommended in point 1 above.

These activities were omitted from DCP145. Due to the environmental sensitivity of such activities, there has been a reluctance to conduct such works, or even approve works by residents such as minor dredging to restore beach fronts and/or stabilise sea walls.

Current Status

Residents have been requesting that funding from mooring lease charges, which has been steadily accumulating, be used to carry out maintenance works within the canals. The president of the St Huberts Island Residents Association has been at the forefront of these requests.

There have also been requests by residents for Council to conduct various works in the canals, as well as for residents to be able to conduct private works. This is especially so in the case of residents repairing private seawalls and boat ramps.

Consistent Seawall Design

It has also been recognised that a set of minimum requirements for seawall design within/adjacent to land across St Huberts Island and throughout the Brisbane Water Estuary to include:

- o Consistent seawall toe levels (i.e. 0m AHD?)
- o Consistent seawall crest levels
- o Consistent design (so as seawalls are progressively constructed they effectively link to each other without creating failure points or pressures on neighbouring foreshore structures)
- o Consistent appearance through use of materials such as sandstone, concrete or other material as appropriate
- o Incorporate Environmentally Friendly Seawall Design Elements in line with the NSW Governments Environmentally Friendly Seawall Design (which itself may offset any impacts of seagrass removal)

Objective

The objective of this consultancy is to provide clear guidelines and procedures for proponents to:

- conduct minor dredging of the canal areas
- maintain and / or restore minimum depths for boating,
- maintain and / or restore foreshore ecological values
- stabilise and remediate seawalls and foreshore structures
- encourage suitable sediment / sand movement to minimise the requirement for dredging and other canal maintenance activities.
- conduct miscellaneous restoration and maintenance works, including removal of wrack (seaweed/seagrass accumulation).
- set clear intervention levels for when dredging of the canals is required, including likely frequency and cost (for budgetary purposes).
- ensure consistency and uniformity of seawall and boat ramp construction
- construct pontoons and walkway structures

It is envisaged that the completed POM will provide clear guidelines on all required environmental and planning–approvals and will outline how property owners (including Council) shall undertake ongoing maintenance to restore the drainage canals of St Huberts Island to their original design criteria.

Other Considerations

Coastal Zone Management Plan for Brisbane Water (CZMP)

<http://search.gosford.nsw.gov.au/documents/00/12/05/23/0012052359.pdf>

There are a number of management actions in the Coastal Zone Management Plan for Brisbane Water which relate to the St Huberts Island canals and foreshores including:

Action P08: Review and revise GDCP 2013 Chapter 3.16 Water Recreation Structures to ensure consistency with the goals and objectives of the Estuary Management Study and Plan. In particular, explicit consideration of sedimentary processes should form part of the assessment process for all development applications.

Action W19: Undertake an ongoing program of maintenance to restore the drainage canals

of St Huberts Island to their original design criteria.

Action W35: Investigate appropriate sediment control works to address sediment accretion issues at St Huberts Island.

Action W29: Implement shoreline protection works which incorporate environmentally friendly design features.

Action E09: Provide foreshore property owners with information/guidelines about what constitutes good and bad practice with respect to foreshore management (e.g. stabilisation works, etc.). This should include information on environmentally friendly seawall options to both the community and those individuals assessing development applications for these structures. Reference should be made to DECC's Environmentally Friendly Seawalls: A Guide to Improving the Environmental Value of Seawalls and Seawall-lined Foreshores in Estuaries (2009).

Brisbane Water Foreshore Floodplain Risk Management Study & Plan (BWFFRMS&P)

Brisbane Water Flood Study

<http://search.gosford.nsw.gov.au/documents/00/13/00/89/0013008913.pdf>

Brisbane Water Foreshore Floodplain Risk Management Study

<http://search.gosford.nsw.gov.au/documents/00/20/55/86/0020558654.pdf>

Brisbane Water Foreshore Floodplain Risk Management Plan

<http://search.gosford.nsw.gov.au/documents/00/20/60/21/0020602145.pdf>

PM7: Review and amend planning instruments and development contracts

FM5: Develop guidelines for sea wall design and maintenance

FM3: Develop guidelines for the wave run-up management

Gosford Development Control Plan (GDGP)

Action P46: Review existing GDGP 2013 Chapter 3.16 Water Recreation Structures with a view to ensuring the policy is in accordance with the goals and objectives of the Estuary Management Study and Plan.

Action P47: Encourage jetty sharing arrangements via the leasing mechanism such that each jetty services 2-3 properties. This will involve review of applications for new leases as well as license/lease renewals.

Action P48: Develop environmentally friendly design and construction guidelines for foreshore infrastructure such as jetties, boat ramps, seawalls/retaining walls and foreshore protection works. This should include advice on retro-fitting existing structures to be more environmentally friendly. The guidelines should be made publicly available and distributed to all foreshore property owners.

Action P49: Develop guidelines (or compile existing guidelines where available) for foreshore stabilisation via the establishment of locally native estuarine plant species. The guidelines should provide details of the benefits of soft stabilisation works, advice on the species to be used and how to establish plantings.

These actions must be considered in the preparation of a Plan of Management for the canals.

The plan should also include reference to the Brisbane Water Foreshore Flood Study (Cardno 2013) and the Brisbane Water Foreshore Floodplain Risk Management Study and Draft Plan (2015). There is an opportunity for a consistent approach moving forward as these

studies are adjacent to the proposed POM.

Guidelines should provide cost effective options for dredging & repairs & / or replacement of seawalls & other infrastructure by Council or landowners.

Environmental Comments

The following Environmental factors should also be considered in the proposed POM.

- Water quality management – floating silt curtains and booms during construction of seawalls or jetties etc.
- Sea level rise, erosion and sediment movement.
- Management of wrack (dry washed up seagrass)
- Seagrass impacts.
- Oyster Lease impacts.
- Acid sulfate soils management.
- Bush Stone Curlew management – exclusion zone around Beachfront Parade Reserve.
- When is consent required? What works can Council do without consent? What works can residents do without consent?
- Does repair work to existing seawalls require consent?
- When is a controlled activity approval required from Office of Water?
- When is a Fisheries Permit required from DPI?
- Integration of this management plan with the Brisbane Water Management Plan.
- Integration of this plan with Gosford Development Control Plan 2013.

Information to be provided by Gosford City Council

Coastal Zone Management Plan for Brisbane Water (CZMP) ([Link](#))
Brisbane Water Flood Study ([Link](#))
Brisbane Water Foreshore Floodplain Risk Management Study ([Link](#))
Brisbane Water Foreshore Floodplain Risk Management Plan ([Link](#))
Planning documents for Brisbane Water Estuary including:-
Brisbane Water Estuary Processes Study (2008) ([Link](#))
Brisbane Water Estuary Management Study (2009) ([Link](#))
Gosford Development Control Plan (GDGP) (attached)
Development Control Plan DCP145 (attached)
Guidelines for Plan of Management (GPOM) (attached)
DECC Environmentally-Friendly-Seawalls (attached)
Mapping information currently available in Councils GIS.

Deliverables

Plan of Management to include recommendations for identified management actions of the Coastal Zone Management Plan for Brisbane Water
Guidelines on appropriate foreshore construction techniques to include typical cross sections showing AHD, tide levels projected swell & wave run up levels.

Variations

Council may, by written notice to the Consultant, direct the Consultant to vary the scope of the service.

Any additional fee payable to the Consultant as a result of any variation shall be agreed between Council and the Consultant prior to any additional work being undertaken.

Quotation

The Consultant shall provide a quotation for services on the basis of a lump sum fee that should include GST.

The Consultant shall allow for a minimum of three meetings with Councils representatives as follows

1. Inception – to discuss & confirm scope of requirements.
2. Draft – to review & discuss any amendments.
3. Final – to review & confirm Councils acceptance of the documents.

Minimum requirements for meetings are to include preparation of agenda & taking of minutes

The consultant shall submit a timeline showing stages of development of the documentation & proposed meetings.

Your quotation is required by Tuesday, 29th March 2016 & must be submitted via Vendor Panel.

The Draft Report should be received within 10 weeks of the contract being awarded, unless the Consultant advises otherwise.

Any queries regarding this RFQ can be addressed to Councils Contact however they should then be formalised by submission through Vendor Panel.

Councils Contact is:-

Chris Drinan
Project Development Engineer
Construction Planning & Management

Chris.drinan@gosford.nsw.gov.au
Ph. 4325 8907
Mob. 0408 680 185



Appendix A

Attached Documents & Links

<u>Document Name</u>	<u>Abbreviations</u>	<u>Attached</u>	<u>Linked</u>	<u>Website</u>
Gosford Development Control Plan 2013 Chapter 3.16 Water Recreation Structures	<u>GDCP</u>	<u>Yes</u>	<u>n/a</u>	<u>n/a</u>
Development Control Plan No 145 'Mooring Facilities on St Huberts Island'	<u>DCP 145</u>	<u>Yes</u>	<u>n/a</u>	<u>n/a</u>
Recommended Guidelines for Plan of Management for the drainage reserves of St Hubert Island'	<u>GPOM</u>	<u>Yes</u>	<u>n/a</u>	<u>n/a</u>
DECC's Environmentally Friendly Seawalls:A Guide to Improving the Environmental Value of Seawalls and Seawall-lined Foreshores in Estuaries (2009).	<u>DECC</u>	<u>Yes</u>	<u>n/a</u>	<u>n/a</u>
The Coastal Zone Management Plan for Brisbane Water	<u>N/A</u>	<u>N/A</u>	<u>Yes</u>	http://search.gosford.nsw.gov.au/documents/00/12/05/23/0012052359.pdf
Brisbane Water Flood Study	<u>N/A</u>	<u>N/A</u>	<u>Yes</u>	http://search.gosford.nsw.gov.au/documents/00/13/00/89/0013008913.pdf
Brisbane Water Foreshore Floodplain Risk Management Study	<u>N/A</u>	<u>N/A</u>	<u>Yes</u>	http://search.gosford.nsw.gov.au/documents/00/20/55/86/0020558654.pdf
Brisbane Water Foreshore Floodplain Risk Management Plan	<u>N/A</u>	<u>N/A</u>	<u>Yes</u>	http://search.gosford.nsw.gov.au/documents/00/20/60/21/0020602145.pdf

Brisbane Water Estuary Processes Study (2008)	<u>N/A</u>	<u>N/A</u>	<u>Yes</u>	http://www.gosford.nsw.gov.au/docs/default-source/environment-and-waste-documents/environmental-management-and-planning/brisbane-water-estuary-process-study-2009.pdf?sfvrsn=2
Brisbane Water Estuary Management Study (2009)				http://www.gosford.nsw.gov.au/docs/default-source/environment-and-waste-documents/environmental-management-and-planning/brisbane-water-estuary-management-report-2010.pdf?sfvrsn=2