

Newsletter No. 2 October 2007

Hello Everyone,

Welcome to the second Botany Bay Coastal Catchments Initiative (BBCCI) Newsletter!

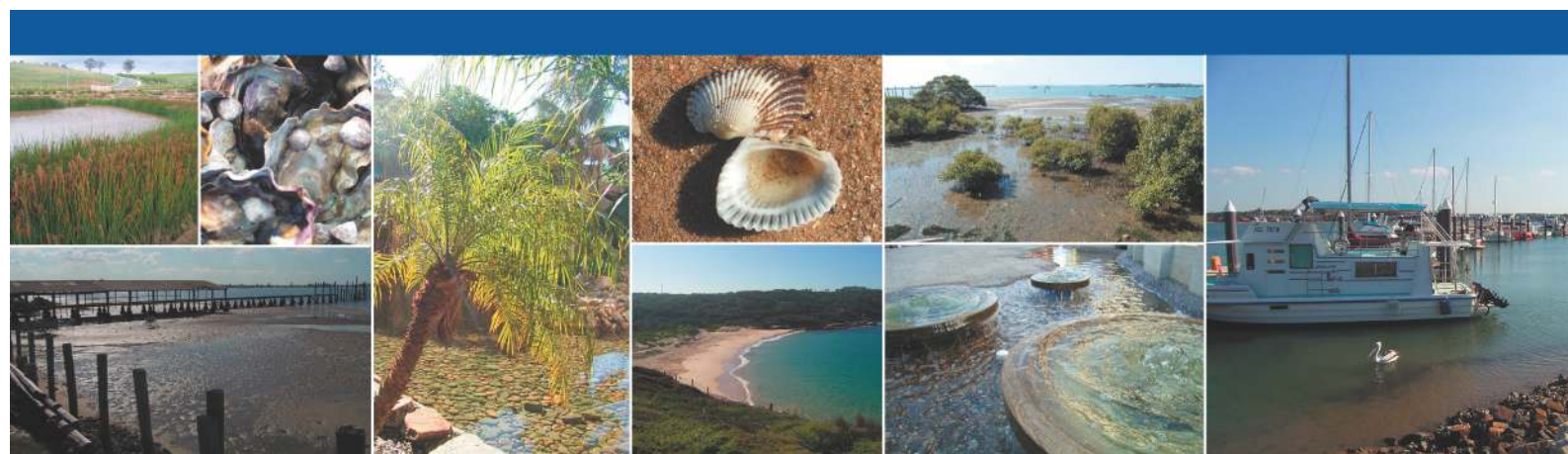
The aim of the newsletter will be to keep you, councils, state agencies and the community informed on progress being made on the BBCCI.

If this newsletter has been forwarded to you and would like to receive future BBCCI newsletters (approximately every two months) please send an email to bbcci@cma.nsw.gov.au with join in the subject line. Likewise if you're not interested in receiving future newsletters please reply to this email and let me know and I will take you off the list.

Update on Progress

The major activities being undertaken in the BBCCI are listed below in the approximate order they are planned to occur up to mid 2008:

Activity	Status
Prepare a Scoping Study,	Completed
Map the Botany Bay Catchment and sub-catchments,	Completed
Prepare a Consultation Strategy,	Completed
Set draft levels of protection for the environmental values of Botany Bay and its catchments waterways,	Underway
Model the current contributions of nutrients and sediments pollution in the catchment,	Completed
Conduct an ecological character assessment of the Towra Point Ramsar listed wetland,	Underway
Develop a hydrodynamic model for Botany Bay and catchment watercourses,	Completed
Establish an ecological response model of Botany Bay and its estuaries, which will be used to determine how much of several key pollutants that Botany Bay and its major tributaries can receive each year before irreversible ecological damage occurs,	Underway
Identify opportunities and barriers to the adoption of water sensitive urban design in the catchment,	Underway
Develop draft water quality objectives and load targets needed to protect the draft environmental objectives,	Yet to commence
Develop management options to meet the water quality objectives and load targets and assess the cost and effectiveness various options and select most appropriate options to achieve targets,	Yet to commence
Develop a water sensitive urban design (WSUD) adoption strategy and support councils and other government agencies including WSUD in their planning processes.	Underway





How important are Botany Bay and its waterways to you?

I am conducting workshops over the next few months to give a brief overview of the BBCCI and to seek your input into “resetting” or agreeing on some interim environmental values and levels of protection for the estuaries and freshwater waterways of the Botany Bay and its catchment.

The workshop only takes about 1 ½ to 2 hours and can be brought to you. It will allow you to have your say on how you use/value Botany Bay’s waterways (including upstream freshwater catchments), what are the main pressures on them, what management measures you think will help protect the waterways. You will also be participating in setting some interim aquatic ecosystem protection levels for Botany Bay, its estuaries, and freshwater waterways.

Please give me a call to book a workshop for your council/council area or community group or organisation.

Pollutant Load Modelling Results for Botany Bay

The pollutant loads being generated throughout the catchment have now been modelled. This modelling was done to help give accurate information to the Ecological Response Model being developed for Botany Bay and its estuaries. The table below highlights the increases in certain pollutants (constituents) that have occurred since settlement in the catchment. The full report (about 45 pages) can be downloaded from the BBCCI website at

<http://www.sydney.cma.nsw.gov.au/bbcci/StormwaterPol.html>

Constituent*	Mean Annual Load (tonnes/yr) Pre-European	Mean Annual Load (tonnes/yr) Current
Flow GL/yr	260 (GL/yr)	290 (GL/yr)
TSS	7,600	21,000
TOC	1,900	3,700
TN	180.	360
TP	16	39
BOD	1,100	2,600
FC (*10 ¹² counts/yr)	1.1 (*10 ¹² counts/yr)	20 (*10 ¹² counts/yr)

* **TSS**= Total Suspended Solids, **TOC**= Total Organic Carbon, **TN**= Total Nitrogen, **TP**= Total Phosphorous, **BOD**= Biochemical Oxygen Demand, **FC**= Faecal Coliforms

Contact Details

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Australian Government



Botany Bay Ecological Response Model

This part of the BBCCI is being undertaken by the Water Science team in the Department of Environment and Climate Change (NSW EPA). The ecological response that we are interested in is the long term levels of phytoplankton (free-living single-celled plants). The model is currently being operated for current conditions, with the output being validated against current and historical monitoring data from Botany Bay and its rivers. I will report on the findings from this modelling in later newsletters

Ecological Character Description of Towra Point Wetland

DECC are also well underway on an Ecological Character Description (ECD) of the Towra Point Wetland. This is an internationally significant wetland and is a Ramsar listed site. The ECD is a requirement under the Ramsar Convention and is a report on the ecological condition of the wetland at the time it was listed in 1984. The report enables future assessment of the condition of the wetland against this baseline and to recognise how much change has occurred. Any change outside the natural variation to beyond a defined limit could have a degrading effect on the wetland. The report defines the limits of acceptable change outside the natural variations for the components and processes of the wetland (such as the levels of nutrients in the water column) in order for better management and monitoring of the ecosystem as a whole. It is anticipated the ECD for Towra Point Wetland will be completed by the end of this year.

Barriers and Opportunities for WSUD Adoption

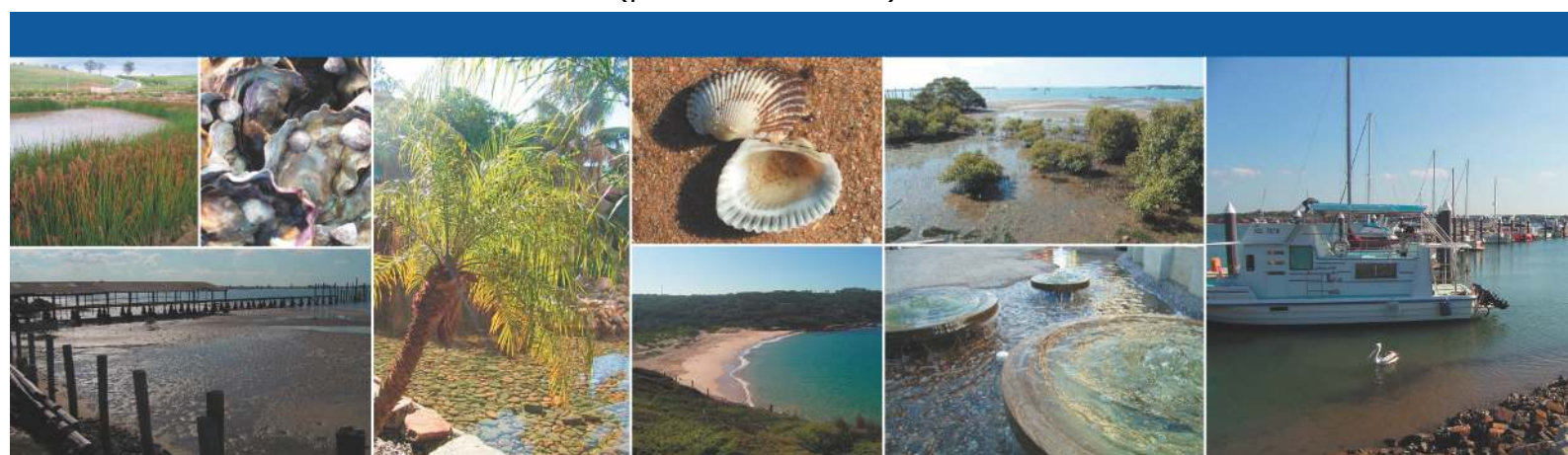
We have just started a research project looking at the barriers and opportunities for water sensitive urban design (WSUD) adoption in the Botany Bay catchment. The research is being conducted by Peter Morison from Monash University and EDAW Consulting. They will be contacting council staff and developers in the catchment over the next month to get your input. A draft issues report will be produced in mid November with a Participatory Stakeholder Solutions Workshop held in late November. The research findings will be of great use to councils, developers and state agencies as well as the BBCCI so I encourage you all to participate and put forward your ideas.

Sydney Metro CMA Urban Stream Management Workshop (Free)

Topic: Vegetation Management, Design & Establishment

Date: Friday 16th November 2007 1:30 - 4:30 PM (CMA Offices, Parramatta)

A light lunch will be provided so come along a bit earlier so you don't miss out on a sandwich! If you would like to attend please call Johanna Brown at the Sydney Metro CMA on 02 9895 7898 (places are limited).





Presenters:

Kathryn Duchatel, Earth Tech: *Planning, design, implementation & establishment of riparian communities*

Through a case study - Girraween Creek - Kathryn will explore the need to investigate site issues, develop a vegetation management plan, timely procurement of plant stock, techniques and monitoring of the revegetation project.

Geoff Sainty, Sainty & Associates: *Aquatic Weeds*

Geoff will speak about the impacts of aquatic weeds (choking of stream, changes to water oxygen levels, increased flooding) and implications for remnant riparian vegetation and weed control methods.

5th International WSUD Conference (Sydney 21-23 August 2007)

The 5th International Water Sensitive Urban Design Conference was held in Sydney in late August. There were some very interesting presentations and discussions on protecting urban waterways, capacity building, rainwater and stormwater harvesting. If you were unable to attend you can purchase a CD on all the papers presented (\$55 plus Postage) see www.rainwater2007.com

BBCCI Website

A website has been created and it will have all the latest information on the Initiative and copies of any reports or findings. You will also be able to find copies of this and past Newsletters as well as pictures from around the Botany Bay Catchment at the website.

www.sydney.cma.nsw.gov.au/bbcci

What is a Coastal Catchments Initiative and who is funding it?

- This Initiative is seeking to achieve long-term protection of the surface waters of Botany Bay, its estuaries and its catchment.
- To produce a scientifically derived ecological response model of Botany Bay and its estuaries that can be used to model the impacts that changes in the catchment will have on the Bay's ecological communities.
- It will primarily be focused on the pollutants washing off the hard surfaces in the catchment (suspended solids, nitrogen and phosphorus).
- It will also engage with councils, key stakeholders and the community in the Botany Bay Catchment so they can participate in finding and implementing innovative solutions to improve water quality in the Bay and catchment.

The BBCCI is majority funded by the Australian Government and being project managed and part funded by the Sydney Metropolitan Catchment Management Authority.

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