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Minutes of the 13th meeting of the  
**Lower Hawkesbury Estuary Management Committee**  
Thursday 23rd August, 2012  
Brooklyn Community Centre  
2-4 Dangar Rd, Brooklyn

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<b>Title</b>	<b>Family Name</b>	<b>Given Name</b>	<b>Representatio n</b>	<b>Present</b>	<b>Apologies</b>	<b>Absent</b>	<b>Alternate Rep.</b>
Mr	<b>ANDREWS</b>	John	Mooney-Cheero Progress Association	X			
Mr	<b>BERGMAN</b>	Peter	Office of Environment & Heritage, NSW National Parks & Wildlife Service			X	
Mr	<b>BLACK</b>	Steve	NSW Maritime Authority		X		Hendrik Classie
Prof.	<b>BOOTH</b>	David	University of Technology Sydney & Sydney Institute of Marine Sciences		X		
Mr	<b>BROWN</b>	Warren	Gosford City Council		X		
Mr	<b>GREEN</b>	Marcel	Industry & Investment, Primary Industries Fishing & Aquaculture		X		
Ms	<b>COLLINS</b>	Emma	Community Representative			X	
Ms	<b>MARVELL</b>	Cheryl	Sydney Water Corporation		X		
Mr	<b>FENWICK</b>	Andrew	Fenwicks Marina	X			
Ms	<b>FIELD</b>	Melanie	NSW Food Authority		X		
Mr	<b>FISH</b>	Mike	Community Representative			X	
Ms	<b>FRATER</b>	Melissa	NSW Bridge to Bridge Committee			X	
Cllr	<b>FREEWATER</b>	Peter	Gosford City Council			X	
Ms	<b>HOWARD</b>	Mary	Community Representative		X		
Hon	<b>LLOYD</b>	Jim	Mooney-Cheero Progress Association			X	
Mr	<b>MACDONALD</b>	Tim	Gosford City Council	X			
Cllr	<b>MCMURDO</b>	Wendy	Hornsby Shire Council	X			
Mr	<b>MICHOS</b>	Arthur	Office of Environment & Heritage		X		
Mr	<b>MILES</b>	David	Boat Owners Association		X		
Ms	<b>MOOY</b>	Rebecca	Hawkesbury Nepean Catchment Management Authority	X			
Mr	<b>NORINGTON</b>	Rolf	Hawkesbury River District Fishermans Co-operative		X		
Mr	<b>PIGNEYGUY</b>	Justin	Hawkesbury Cruises		X		
Emer. Prof.	<b>RECHER</b>	Harry	Community Representative		X		
Mr	<b>REES</b>	Stan	Land and Property Management Authority	X			
Mr	<b>ROWE</b>	Simon	Oceanwatch Australia		X		
Ms	<b>RUBIO-ZUAZO</b>	Ana	Community Representative		X		
Cllr	<b>RUSSELL</b>	Steve	Hornsby Shire Council		X		
Ms	<b>SEGOVIA</b>	Ingrid	Community Representative	X			
Mr	<b>STUBBS</b>	John	Broken Bay Oysters Association	X			
Mr	<b>VON ZELEWSKI</b>	Axel	Community Representative	X			

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## 1. WELCOME

Cllr McMurdo welcomed Steve Federow from Hornsby Shire Council and Hendrik Classie from NSW Maritime.

## 2. APOLOGIES

Apologies received from Warren Brown, Dave Booth, Marcel Green, Cheryl Marvell, Mary Howard, Arthur Michos, Simon Rowe, Ana Rubio-Zuazo, Cllr Martin, Harry Recher, Melanie field and David Miles.

## 3. DECLARATION OF PECUNIARY INTERESTS

No pecuniary interests declared.

## 4. PRESENTATION

### **John Stubbs – Broken Bay Oysters Association**

- High amount of rainfall received this year; ~952mm to date
- Farmers have had to move stock downstream to avoid the freshwater influx
- Southern Right Whale and her calf spotted in the Hawkesbury on 27<sup>th</sup> July 2012
- Broken Bay Oysters collaborating with Shellfish Culture and researches to investigate farming methods to mitigate the impact of Pacific Oyster Mortality Syndrome (POMS)
- Increasing the height of the trays by 300mm is one option being investigated
- Researchers have impacted sites in the Georges River and control sites in the Hawkesbury River
- Broken Bay Oysters are currently introducing and trialling long lines in Porto Bay
- Cooperation and donations relevant to POMS research include
  - o Research Family Lines from ASI – Tasmania
  - o Spat from Shellfish Culture – Tasmania
  - o Long lines and baskets from BST – South Australia
  - o Long line poles from Woodshield – Victoria & Queensland
  - o Family Trial Lines from NSW DPI – NSW
  - o Georges River monitoring from Drake Bros – NSW
  - o In kind support from Broken Bay Oysters Association - NSW

Discussion was held regarding the success and challenges of the POMS research:

- Virus becomes active between 17 & 24°C
- Possibility that UV light influences the virus
- Farming methods, such as increasing the basket height, are potential short term management options as the development of resistant breeding lines may take up to 10 years
- POMS is similar to a herpes virus that causes mortality in pilchards
- There is little known about how the virus is transferred; ballast water could potentially transport the virus

### **Prof David Booth – Marine Climate Change in Australia: Impacts and Adaptation Responses 2012 Report Card.**

Report Card released which is an update of the 2009 report. The goal of the report card is to synthesize findings relevant to Marine Climate and Biodiversity for the general public and managers, in the hope that scientific findings may be mainstreamed in deciding how

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to combat climate change. Please see attached report for Prof Booth's full summary (attachment-1).

### **Sustainable Marine Products**

- Victorian business 'A Better Way To Go'
- Two products of interest
  - o Airhead composting toilet
    - Fully self contained; no outfall
    - Uses no chemicals or water
    - Odourless system
  - o BioSok
    - All natural product
    - Absorb and biodegrade fuel and oil while it is still in the bilge
- Any committee members interested in further information on sustainable marine products should contact Peter Coad.

## **5. MATTERS ARISING FROM PREVIOUS MEETING AND CORRESPONDENCE**

### **Correspondence:**

No committee correspondence received

### **Matter arising from previous meeting, 24<sup>th</sup> May 2012:**

**Action 201202:** That the Team Leader – Estuary Management request Sydney Water present to the LHEM Committee the results from the dye testing and the implications for plant design and performance. **Complete.**

Sydney Water will be presenting at the LHEM Committee meeting on the 22<sup>nd</sup> November 2012.

**Action 201203:** That the Team Leader – Estuary Management request the Water Keeper present to the LHEM Committee. **Complete.**

The Water Keeper is unable to present to the LHEM Committee and only operates upstream of Wisemans Ferry.

**Action 201204:** The Team Leader – Estuary Management to request information from National Parks regarding the management of local Aboriginal artwork. **Ongoing.**

**Motion 201205:** That the minutes of the Lower Hawkesbury Estuary Management Committee meeting, Thursday 22<sup>nd</sup> March, should be accepted. **Complete.**

**Action 201206:** Tim Macdonald, Gosford City Council, to update the LHEM Committee on the progress of the Mooney Mooney and Cheero Point connection to the Brooklyn Wastewater Treatment Plant. **Ongoing.**

66% of properties have connected, with approximately 80 properties still not connected. A contractor has been engaged to address the needs of more difficult properties. John Andrews noted that some residents are eager to connect but do not want to join an aggregated system. Tim Macdonald will provide updates to the committee as relevant.

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**Action 201207:** Peter **Coad**, Team Leader – Estuary Management, to distribute Gosford City Council’s biodiversity surveys to interested committee members. **Complete.**

**Action 201208:** Peter **Coad**, Team Leader – Estuary Management, to report to the LHEM committee on actions undertaken to reduce dogs on Bradleys Beach. Options to consider include writing to Dangar Island residents, increased compliance and improved signage. **Ongoing.**

**Action 201209:** Melissa **Frater** to report to the LHEM committee on preparation being undertaken for the 2012 Bridge to Bridge race. **Ongoing.**

Hendrik **Classie** noted that the date proposed for the 2012 race is 2<sup>nd</sup> December, as the tides are not suitable in November.

**Action 201210:** The LHEM Committee to write a letter of thanks to the Guaslaas for their efforts in supporting Graham Johnston and cleaning up the Hawkesbury River. **Complete (HSC Ref D01972360).**

**Action 201211:** NSW Maritime to respond at the next LHEM Committee meeting to concerns that rubbish in Refuge Bay had increased since the removal of the garbage barge. **Complete.**

Hendrik **Classie** reported that the rubbish barge had been removed around August/September 2009, due to increased compliance issues. Industrial and commercial waste was being placed on the barge instead of waste from recreational vessels as intended. This was the first report of increased waste received by NSW Maritime following the removal of the barge. NSW Maritime will discuss the issue with the NPWS as they are active in removing rubbish on the foreshore. The barge is a NSW Maritime vessel and they are currently considering options for selling the vessel.

**Action 201212:** The LHEM Committee to write a letter of thanks to Beaurepaires Hornsby for their assistance in removing tyres from the Hawkesbury River estuary. **Complete (HSC Ref D01972363).**

## **6. ACCEPTANCE OF MINUTES OF PREVIOUS MEETING**

Minutes of the Lower Hawkesbury Estuary Management Committee meeting, Thursday 24<sup>th</sup> May, 2012 were accepted.

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**MOTION 201113:** That the minutes of the Lower Hawkesbury Estuary Management Committee meeting Thursday 24th May 2012, should be accepted. Moved by John **Andrews**, seconded by Andrew **Fenwick** . Carried unanimously.

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## **7. PROGRESS REPORT ON THE LOWER HAWKESBURY ESTUARY MANAGEMENT PROGRAM**

### **Peter Coad – Hornsby Shire Council**

#### Water Quality Monitoring Probe Data

– 20<sup>th</sup> June, high levels of small flagellates (cryptomonads, prasinophytes, dinoflagellates) with very few diatoms

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- Elevated chlorophyll-a levels evident prior to a rainfall event which is unusual

#### OEH Estuary Grants Submitted

- Kangaroo Point seawall and foreshore rehabilitation (\$80,000)
- Kangaroo Point to Seymours Creek boardwalk (\$262,120)
- Environmental status of sediments in the Hawkesbury estuary (\$70,000)
- Real time estuarine health monitoring in the Hawkesbury estuary (\$55,000)
- OEH has not confirmed the success or otherwise of these grant submissions

#### Bar Island Bush Regeneration

- Emphasis on weeding around the jetty and saltmarsh
- Ochna and vinca removal
- Floating Landcare visited the Island on the 1<sup>st</sup> and 4<sup>th</sup> August
- Volunteers undertook bush regeneration (mostly lantana control) and rubbish removal
- Supported by the Hawkesbury Nepean CMA

#### Brooklyn School Project

- Assist Brooklyn School plant a themed landscape area
- Using local plants sourced from local seed stock
- Creating an outdoor learning area with a river theme
- The learning area will be shaped like a fish which also has an aboriginal linkage

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**ACTION 201214:** Ingrid **Segovia** to provide the LHEM Committee with the design and an update on the progress of the Brooklyn Public School outdoor learning area.

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#### Real time temperature, salinity and swimming mapping

- Interactive site is now operational
- Explanatory text is being written
- The site will be release with the new water quality report card

#### CSIRO Collaboration

- Visit to Tasmania to the CSIRO and the Barilla Bay oyster farmers
- Tasmanian opening and closure decisions for oyster harvesting is made on salinity as opposed to rainfall
- Possibility of deploying the CSIROs new autonomous underwater vehicle (AUV) in the Hawkesbury as part of the sediment and antifoul project
- So far this technology has only been used in the Derwent River

#### Witness King Tides

- A community driven photography initiative that aims to raise awareness and action on sea level rise, emergency preparedness and adaptation to climate change
- In QLD during the 2011/12 project, over 1600 images were collected from all over the state
- Green Cross Australia is seeking contributions from coastal councils around Australia to allow a scale-up of the initiative
- Wendy McMurdo noted that Phil Watson requires support to continue this project, the report is available on OEH and SCC website
- <http://www.witnesskingtides.org/>

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- <http://www.environment.nsw.gov.au/climateChange/kingtide.htm>

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**ACTION 201215:** Team Leader – Estuary Management, to send the Witness King Tide website and related information to Committee members.

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#### Surf Lifesaving Cleanup

- 6 clean up activities since the last meeting
- Volunteers from
  - Rowland Hassall Special Needs school
  - Brisbane Waters Secondary College ‘Special Ed Unit’ and ‘The Croft’
  - MacMasters Beach Surf Life Saving Club
- Support received from
  - Hornsby Shire Council
  - Gosford City Council
  - Hawkesbury Nepean CMA
  - National Parks
  - Broken Bay and Brisbane Waters oyster farmers
  - Department of Sport and Recreation
- Gosford City Council is looking to support the clean up program through WASIP funding

#### Kangaroo Point Pumpout Facility

- 656 012L pumped out since 2008
- 89 469L pumped out this year
- Problem with power outage and phone line cut
- Illegal dumping becoming an issue in the area

#### Estuarine and Migratory Bird Surveys

- Surveys completed by Peter and Judy Smith
- Focused on large farm dams, intertidal mud flats and upper reaches
- Draft report prepared and will be finalised by the end of October.

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**ACTION 201216:** **Committee members** to notify Peter Coad if you would like to comment on the draft report before finalisation.

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#### One Tree Reach

- Weir installed to control tidal inundation
- Protect against acid sulphate soil exposure

#### **Tim Macdonald – Gosford City Council**

- Brisbane Waters Estuary Management Plan was adopted by Gosford City Council in early July 2012
- If committee is interested Tim can organise a presentation on the plan and process
- Findings from the Coastal Task Force addressing NSW sea level rise benchmarks and associated difficulties are to be released in next couple of months
- Gosford City Council is currently developing a Management Plan for Pearl Beach lagoon.
- Ospreys are nesting on an antenna tower at the Gosford City Council depot; a dedicated nest has been erected to protect the birds

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## **Rebecca Mooy – Hawkesbury Nepean Catchment Management Authority**

- Projects assessed for HNCMA funding include
  - Estuarine vegetation rehabilitation and prioritisation (Bar Island, Kangaroo Point, Brooklyn)
  - Restoration and rehabilitation of threatened species and endangered ecological communities within Ku-ring-gai Chase NP, Marramarra NP and Maroota Ridge SCA
  - Pittwater weeds of significance project (Barrenjoey High School, Bilgola Headland, North Newport Beach, Palm Beach)
  - Restoration of the Bilgola Creek Catchment and coastal vegetation communities – stage 2
  - Bush regeneration at Richard Woodbury Reserve
  - Removal of invasive weeds from dune adjacent to restored hind dune on Bungan Beach
- Projects pending HNCMA assessment include
  - Continuation of vegetation restoration of the upper reaches of Crafts, Popran, Ironbark and Bedlam Creeks
  - Continuation of Waterwater Project Officer
  - Working with private landholders on hanging swamps
  - “Love the River” 2012/13. Campaign to educate recreational boat users about good boating practises.
  - MacMasters Beach SLSC foreshore clean-ups 2013
  - Morning Bay ‘Asparagus Fern Out’ weekends
- Estuary activities coming up include:
  - National Landcare Conference estuary tour
  - NSW CMAs Chairs and GMs estuary tour
  - Floating Landcare
    - Sandbrook Inlet – 15<sup>th</sup> September
    - Hungary Beach – 19<sup>th</sup> September
    - Peats Bight – 20<sup>th</sup> October
  - 2012 Source to Sea Landcare paddle – 5-9 September
- Caring for Our Coast Achievements 2009-2011
  - 130 coastal community organisations engaged in NRM through 47 awareness raising events and 31 training opportunities
  - 31 coastal community organisations supported through projects that aim to rehabilitate, restore and conserve the coast and estuary
  - 50Ha of Weeds of National Significance reduced
  - 65 media releases, posters, fact sheets and newsletters delivered

## **8. GENERAL BUSINESS**

### **A. Protection of birds on Mareela Reef**

- A letter to Dangar Island residents cannot be sent during Council’s caretaker period so this activity is on hold
- Council’s companion animal officers have visited the island 3 times since the last meeting; only 1 complaint has been received during this period.
- Stan **Rees** suggested establishing Mareela Reef as a wildlife refuge and distributed brochures on Voluntary Conservation Wildlife Refuges.
- It may be possible to adjust the zoning and develop a wildlife refuge or a conservation area.



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**ACTION 201217:** Stan **Rees** and Peter **Coad** to investigate the option of establishing a Wildlife Refuge on Mareela Reef and to update the Committee at the next meeting.

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- Leong **Lim** noted that a wildlife refuge won't provide any more protection and NPWS will not be able to enforce the area. Stan **Rees** noted that the branding of the wildlife refuge is what will be of benefit.

**B. Church Point Ferry – Carbon Offset Program**

- \$1 extra is charged on a weekly ticket as a carbon offset
- Monitored by an independent consultant (Pangolin Associates)
- The revenue supports Trees for Life
- Open up the idea to the committee for comment or if there were any ideas

**C. Other Business**

- New committee membership for Leong Lim will be on hold until after Councils caretaker period
- Farewell to Kristy Guise who will be moving from the Estuary Program to the Catchment Remediation Program in the position of Environmental Scientist – Water Quality
- Wendy **McMurdo** thanked the committee, with particular acknowledgement given to the Department of Lands, NSW Maritime and Gosford City Council for their consistent representation and participation.

**D. Future Meetings**

The next meeting of the Lower Hawkesbury Estuary Management Committee will be held 6pm, Thursday 22<sup>nd</sup> November 2012, at the Brooklyn Community Centre.

Sydney Water representatives will be presenting at this meeting.

**9. CLOSE**

There being no further business the meeting closed at 8:00 pm

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## **Attachment-1 Marine Climate Change in Australia – Prof David Booth**

Report to: Lower Hawkesbury Estuary Management Committee Aug 23 2012

Re: Marine Climate Change in Australia: Impacts and Adaptation Responses 2012 REPORT CARD

From: David Booth, Committee member and Professor of Marine Ecology, UTS

Last week the Report Card was released, which is an update of the 2009 original version, and involved over 80 authors across Australia. The goal of the Report Card is to synthesize findings relevant to Marine Climate and Biodiversity for the general public and managers, in the hope that scientific findings may be mainstreamed in deciding how to combat climate change.

**Marine Climate** includes ocean temperature, ocean acidification, East Australian current. Findings relevant for the Hawkesbury include:

1. The coast adjacent to the Hawkesbury is a world global warming hotspot, and rises of over 2 degrees celsius are very likely in the next 60 years.
2. Sea level rise rates have accelerated in the last ½ of 20<sup>th</sup> century and rise will continue this century. Inundation of low-lying areas of Hawkesbury catchment are a possibility, impacting on saltmarshes and properties.
3. East Australian current flow rate will increase through this century, with impacts on marine biodiversity in our area as well as coastal climate
4. Ocean acidification is a real issue in tropical and Antarctic waters, little is known of risks in our region.

**Marine Biodiversity** includes mangroves, seagrasses, temperate fishes (I lead this chapter), coral reef fishes, seabirds, macroalgae, pelagic fishes and plankton

1. Temperate fishes: rising ocean temperatures, strengthening East Australian Current and reduced freshwater flows due to climate change mean positive effects on influx of tropical marine species, loss of cooler-water species, and problems for estuary dependent fishes, such as bass, bream etc. River water flow management needs to be addressed to compensate and maintain productive estuaries.
2. Seagrasses: retraction southwards, is potential losses from Hawkesbury
3. Plankton: warmer ocean waters and ocean acidification may reduce productivity of water and plankton abundances, which may impact food webs of outer Hawkesbury estuary.

Another key point is that the spectre of climate change should not be used as justification for pulling back on efforts to curb local human stressors such as land clearances, agricultural runoff, sewage, overfishing etc. In fact effectively managing other impacts is likely to be our best way to climate-proof, or at least delay climate impacts on, the Hawkesbury estuary.

The full report can be accessed at: [www.oceanclimatechange.org.au/](http://www.oceanclimatechange.org.au/)

I'd be happy to answer any Committee or individual questions- my email is David.Booth@uts.edu.au