

SUSTAINABILITY SPEAKING 17

Summer 2015

Port Botany – Sustainable?



The 13th October 2015 marked the 10th anniversary of Frank Sartor's decision to overrule the recommendations of a Commission of Inquiry and approve the 3rd Terminal expansion at Port Botany.



On the same day the Brereton Railing Port Botany's Containers Report was released. The target for rail share in that report was 40% by 2011. The Department of Planning report also released the same day suggested this could be achieved in 2010. In 2011 Port Botany was moving around 10% by rail. The Ports Growth Plan released 5th October 2003 had outlined a plan for sharing the load between Port Kembla and Newcastle with Newcastle taking over as the next container port when Port Botany reached capacity, notionally 3.2million TEU (twenty foot equivalent units). In 2013 Port Botany, Port

Kembla, Enfield Intermodal and Cooks River Terminal were leased for 99 years to a private consortium, NSW Ports, and the 3.2 million TEU cap on Port Botany was abolished. In the past 10 years two additional coal loaders have been approved for Newcastle and NSW Ports in its recently released Master Plan, *Navigating the Future*, states that Port Kembla will be the next container port.

In the Port Botany Expansion Environmental Impact Statement bold claims were made regarding jobs, conservation, and local amenity. The artist's image for Foreshore Beach (above) did not include warning signs about water quality. When community members suggested to the Commission of Inquiry that Foreshore Beach would become an eroded gross pollutant trap the 'experts' hired by Sydney Ports disagreed. Now the Port Authority of NSW is obliged to spend millions of dollars on groynes to stem the erosion while signs advise that swimming should be avoided. According to the NSW Office of Environment and Heritage Beachwatch reports Foreshore is the most polluted beach in the Sydney Basin.

And what about all the jobs? In August, 57 workers were sacked at the third terminal because the new stevedore, SICTL, is only attracting on average one ship a week. All along it was Kembla and Newcastle that needed the jobs

as jobs based around fossil fuels and heavy manufacturing declined. By contrast, the ratio of jobs to residents in Botany municipality is around 3 to 1.

At the Commission of Inquiry the Sydney Ports environmental consultant stated that Penrhyn Estuary would decline if the expansion did not proceed as Sydney Ports would rehabilitate the estuary as part of the expansion. One of the main objectives of the Penrhyn Estuary Rehabilitation Plan was to protect shorebirds and particularly target migratory species. At a recent Port Botany Community Consultative Committee meeting the Port Authority representative reported: **Of the six target species, targets for five of the six have not been met.** In decline: Bar tailed Godwit, Red Knot, Curlew Sandpiper, Red-necked Stint, Double-banded Plover



Little Terns, which have traditionally nested on North Botany Bay, were not targeted.

REGULATION OF SHIPPING EMISSIONS



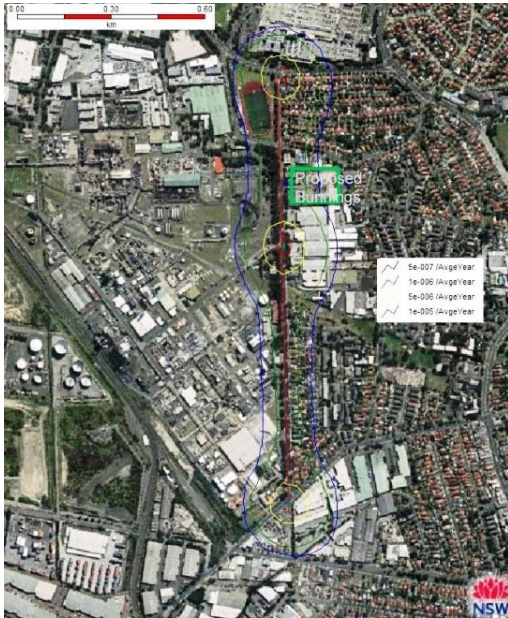
Emissions from ships at Port Botany are not regulated however from 1st October legislation came into force to limit the sulphur content of fuel used by cruise ships in Port Jackson. Given the health impacts it is likely that this will flow on to regulation of emissions from container shipping on Botany Bay.

Recent studies have demonstrated PM2.5 (particulate matter) has health effects at levels below those measured in NSW. In terms of emissions (CO₂, NO_x, SO_x and PM2.5), the large majority occurs outside the Port areas studied. Port Jackson and the Port of Newcastle have approximately the same share of emissions (of total GMA). **Port Botany has approximately double the emissions as these two, dominated by container vessels.** Further information on the EPA website. (In table below GMA = greater metropolitan area).

Table A: Ship emissions GMA in 2013, sum of all on-board engines and boilers, all ship types

	CO ₂	NO _x	SO _x	PM2.5
TOTAL in the GMA (tonnes)	869,649	14,443	14,162	1,553
Port Jackson, share	3.9%	2.0%	3.5%	3.0%
Port Botany, share	10.3%	5.3%	10.5%	9.0%
Port of Newcastle, share	4.5%	2.8%	4.3%	3.9%
Port Kembla, share	2.0%	1.3%	2.0%	1.8%
Balance (non-port GMA emissions)	79.3%	88.6%	79.7%	82.3%

DANGEROUS GOODS



A few months ago officers staged an operation at the RMS Heavy Vehicle Safety Station at Port Botany, where 21 trucks and trailers were inspected, resulting in 28 infringements being issued for various load, defects, and dangerous goods compliance issues. During this time officers inspected a truck conveying full and empty LPG cylinders, finding that the brake pedal was able to be pushed by hand to the floor, and numerous cylinders not secured. This truck also did not carry a safety kit or emergency procedure guides, as is prescribed by vehicles conveying dangerous goods.

Foreshore Road and Denison Street are the designated Dangerous Goods routes for Port Botany. A recent Risk Study conducted as part of the Bunnings Development Approval, 1st April, shows hotspots of cumulative risk along Denison Street. Residents are within the 'unacceptable risk' contour, as shown on a map (see left) contained within an Addendum to a risk report produced for the Department of

Planning. This document is available on the Joint Regional Planning Panel (JRPP) website www.jrpp.nsw.gov.au This is the first time that a publicly released report has presented the cumulative risk of both dangerous goods and major hazard facilities. On Denison Street.

CITIZEN SCIENCE MEETS PLANNING REGULATION AND 'COMMUNITY CONSULTATION'



People don't necessarily have confidence that what was consented to is what's actually going to happen.....there have been plenty of examples where the conditions themselves don't make sensethey are too complicated or there are too many of them, so the response of the company has just been 'well, just ignore it, no one will check on it, and we'll just do

whatever we want". (Planning Minister, Rob Stokes, Sydney Morning Herald 2/5/15)

A recent example of 'doing whatever they wanted' occurred during the Redback development on the Hawkesbury. Streamwatch Citizen Scientists Margaret and Bryan Smith found the turbidity levels in Redbank Creek reaching 400 NTU – a healthy figure in most local creeks is around 10 NTU. Their initial pleas for regulation were ignored but after a front page article in the Hawkesbury Gazette on November 11, the local council put a temporary halt to the development, issued a fine and imposed tougher controls and monitoring. Since then readings have gradually returned to normal.



The problems we face today are so huge that professional scientists alone can't solve them. We're running out of time and need an enormous amount of data to help us find solutions. And so citizen science is coming of age, bird by bird, monarch by monarch, firefly by firefly.

Any form of citizen science leads to change because it influences human relationships with nature. And without citizen science, we'd be unable to find ways to mitigate seemingly insurmountable conservation crises -- such as climate change.



The standard approach to engaging the local community when there are major developments, pollution spills or ongoing EPA regulation is to form a committee. In South Ward we have the Port Botany Community Consultative Committee, Botany Industrial Park Community Consultative Committee, Orora Community Consultative Committee and the Orica Botany Liaison Committee. The last of these covers the stockpile of HCB waste, property development projects such as Southlands, the containment of mercury on site, and the contamination of the Botany Aquifer which is expected to continue into the next century.

(Pictured left an artist's impression of the Orica Botany Liaison Committee celebrating the final clean up of the Botany Aquifer).

Is there a better way to engage than just sit at meetings?



Mónica Ramírez-Andreotta an environmental scientist from Arizona University thought there was and co-designed a citizen science project with a locally impacted community. In early 2008, the Iron King Mine Humboldt Smelter Superfund site in Dewey-Humboldt, Arizona, was added to the U.S. Environmental Protections Agency (EPA) National Priorities List. At a U.S. EPA meeting later in the year, members of the community asked whether it was safe to grow and consume vegetables from their garden. To answer this question, Mónica set up the Gardenroots project. In 2010, residential soils were collected for greenhouse studies and local gardeners were recruited. Training sessions were held early in 2011, to instruct these citizen-

scientists in the collection of garden vegetables, as well as irrigation water and soil samples. Additional educational activities included gardening seminars, community health talks with University of Arizona researchers, and tours of the university laboratories where the concentrations of arsenic in the collected vegetables, water, and soil samples were being measured. At the "Results for Lunch: Your Soil, Water and Vegetable Outcomes" luncheon in early 2012 participants were given personalized booklets showing the results for their individual gardens. Booklets included "raw" data (i.e. milligrams of arsenic per kilogram of vegetable, fresh weight), calculations of how much each participant could eat from his or her own garden at different levels of estimated risk, and estimated risks associated with individual water and soil samples. Handouts with recommended safe practices for gardening were also provided.



species counts.

Partnerships can be developed with experts and regulators to empower impacted communities. Long recognised projects range from water monitoring to soil testing and



FREE EVENTS Jan/Feb 2016

- 16 or 22 January Wetlands Tour Rockdale Council (Booking 95621663)
- 18 January Bare Island Fort Tour (Bookings Randwick Council website)
- 19 January Dr Rip Surf Talk Maroubra (Bookings Randwick Council website)
- 13 February Frog Talk with Dr Arthur White Rockdale Council (Booking 95621663)