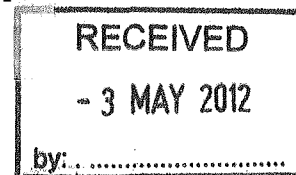


SUBMISSION NO. 15
Inquiry into the Role of Science
for Fisheries and Aquaculture



Submission to the Inquiry into Fisheries and Aquaculture Science

Dear Senators,

This submission relates to the last two terms of reference for this inquiry focusing on the effect that the closure of Cronulla Fisheries Research Centre of Excellence will have on wild fisheries research and therefore the effect on fisheries management in NSW.

A simple solution to this problem would be to have a united national fisheries service which would prevent local politically driven decisions such as the one to close Cronulla Fisheries Research Centre from occurring and would ensure the responsible management of our fisheries for future generations.

Having seven state fisheries departments and several Commonwealth fisheries departments that have responsibilities for delivering science-based management for Australia's fisheries has led to inefficiencies in the delivery of fisheries science and fisheries services. It has also contributed to science being seen as interpretable in different ways, and therefore has led to poor decisions such as the one to close Cronulla Fisheries Research Centre based on bad advice from bureaucrats with no understanding of fisheries science or management.

Cronulla Fisheries Research Centre was the first fisheries research centre in the southern hemisphere and is the only wild fisheries research centre on Australia's eastern seaboard. The centre would be considered absolutely essential by a national fisheries service but is considered expendable by the NSW state government which is simply not fulfilling its responsibility to sustainably manage NSW fisheries according to the Commonwealth Fisheries Management Act 1991.

If a state government is not fulfilling its responsibility in regard to our fisheries, which are a public resource and should not be treated as an asset of the government, then the commonwealth has to step in to prevent such a terrible decision.

I have attached a submission made by the staff to the minister responsible for NSW Fisheries which highlights the importance of Cronulla Fisheries Research Centre, its state-of-the-art facilities and the centuries of knowledge and experience held by staff which will be lost if the closure is allowed to go ahead.

I would also encourage you to examine this website for more information on the poor decision to close Cronulla Fisheries Research Centre - www.savecronullafisheries.net

The solution to this problem is simple. Australia should have a single fisheries science and management department like they have in New Zealand, the US and Canada and the decision to close Cronulla Fisheries Research Centre should be taken out of the NSW government's hands and reversed to preserve this vital component of Australia's fisheries science and management.

Regards,

Joshua Aldridge

**SUBMISSION FROM STAFF AT THE
Cronulla Fisheries Research Centre of Excellence
TO THE MINISTER FOR PRIMARY INDUSTRIES
REGARDING CLOSURE OF THE CENTRE AND THE RELOCATION OF STAFF**

This submission has been prepared in light of the recent announcement to relocate staff from the Cronulla Fisheries Research Centre of Excellence to regional centres. Representatives from commercial management, recreational management and research have contributed to this document.

Staff at the Centre would welcome a visit from the Minister, during which time she could appreciate first hand the relevance of the site, and be briefed on the many programs delivered from here.

We respectfully ask the Minister for Primary Industries to reconsider and change this decision. We base this on several categories of facts: Reducing Stakeholder Service, Loss of Brand, Loss of Expertise, Loss of Facilities, Impacts on Community and Costs.

Reducing Stakeholder Service

The main reason for relocating staff from Cronulla concerns decentralisation of Sydney-based jobs out of Sydney. Yet NSW Fisheries is already one of the Public Sector's most decentralised agencies. There are now 400 Full Time Equivalent employees in NSW Fisheries, 67.5% of whom are based outside Sydney – in fact, only 35% of the division's scientific staff are at Cronulla.

Recreational fisheries management already has staff regionally located where it makes sense to do so. There are currently officers located at Wollongbar, Ebor, Coffs Harbour, Tamworth, Port Stephens, Swansea, Dubbo, Warilla, Narrandera, Albury and Jindabyne. Likewise, research staff are located at Grafton, Coffs Harbour, Port Stephens, Batemans Bay, Narrandera, Maclean, Forster/Tuncurry, Ballina and Eden. Commercial Management has staff located at Maclean, Coffs Harbour and Albury. There are close links between fisheries management and fisheries scientists at all these sites.

Another reason given for the relocation concerns moving fisheries staff to where the fishing occurs. But moving staff currently at Cronulla to Coffs Harbour, Port Stephens and Nowra will have the opposite effect. For example, over 60% of recreational fishers in NSW live in the Sydney Region, and less than 1% in the Nowra area (where the recreational fisheries management team are supposed to go) and approx. 1% in the Port Stephens area (where the scientists are supposed to go).

Even though only 15% of the seafood consumed in NSW is caught by NSW commercial fishers, this is a vital fraction as it is the main source of fresh, healthy seafood available to the consumer. It also drives significant ministerial correspondence and resource allocation issues between sectors, both of which need to be managed by our commercial fisheries management team. Of this catch, 56% comes from areas north of Sydney and 44% comes from Sydney and the South Coast. Most of these fish are sold through the Sydney Fish Market, which provides Cronulla's scientists with the majority of their samples for ageing and stock-assessment work.

There is a perception that the majority of commercial fishing happens in the Coffs Harbour area, however this is inconsistent with the facts. The facts show that there are 3 times the number of commercial fishers in Sydney compared to Coffs Harbour. Even the far south coast is home to more than twice the number of fishers compared to Coffs Harbour.

Commercial fishing on the south coast has already been significantly impacted by the establishment of 20 Recreational Fishing Havens south of Sydney and the Jervis Bay & Batemans Marine Parks. To further disenfranchise those stakeholders by relocating management and research services away from Sydney and the south coast, and breaking them into smaller groups, will greatly disadvantage commercial fishers in those areas. South coast fishers have already informally expressed their concern that the decision to relocate commercial management staff to Coffs Harbour displays favouritism to north coast fishers at their expense and fear that future decisions will also be based on this apparent favouritism. If the argument is that it is difficult for commercial fishers to access researchers and managers under current arrangements, the proposed arrangements will be infinitely worse for the 70% of commercial fishers who do not live in or around the Coffs Harbour Region.

Maintaining a large base of diverse expertise at the Cronulla site aids stakeholder service by the ability for constant communication and updates on a variety of research and management-based programs. It provides for constant integration of ideas from all sectors which are based on stakeholder input. The ability for programs and services to be delivered in a timely manner will be diminished by the loss of staff and the fragmentation of groups.

Notwithstanding the apparent current focus on the Commercial Fishing sector, the main fisher-stakeholders in NSW are not the relatively small number of commercial fishers – but the huge recreational fishing sector. NSW has the largest recreational fishery in Australia (recently valued at over \$500 million) and one of the largest in the world with over 1 million anglers. As mentioned above, over 60% of these anglers live in the Sydney area/basin. Also, one third of the 276

operators in the multi-million dollar recreational charter boat sector are based in the Sydney Region and one third of these are based in Port Hacking and Botany Bay (i.e., adjacent to Cronulla).

The recreational fisheries program in NSW is supported by a licence which generates approx. \$13 million per annum. These funds are used to deliver a range of regulatory and non-regulatory programs such as fisher-safety, artificial reefs, fish stocking, education, research and compliance. There are currently a total of 142 programs funded through the recreational fishing trusts, with 77 of those programs being delivered by NSW DPI. 42 of those programs are managed directly by recreational fisheries management at Cronulla, with the other 35 being research, conservation or compliance programs.

In addition to recreational fisheries managers and researchers managing the delivery of these programs, recreational fisheries managers are responsible for financial accounting, ensuring program delivery, and reporting against program objectives for all 142 current programs. This work is successfully done from Cronulla as the location is central to where the programs are delivered from (i.e., state-wide). Very few, if any, of these programs have strong links to Nowra or Port Stephens.

Recreational fishing is one of Australia's most dangerous recreational activities, with 14 fishers dying last year, and 7 so far this year in NSW. The majority of those deaths occur in the Sydney area, or involve people who lived in Sydney. There have been 2 Coronial Inquests this year, resulting in a range of recommendations which require coordinated management, research and communication strategies. Moving recreational fisheries management and research away from Sydney will significantly hinder the ability to implement these recommendations, and compromise the extensive fisher-safety program. This large program, jointly run by Managers and Scientists at Cronulla aims to minimise the number of lives that are tragically lost each year during fishing accidents.

In an ongoing attempt to reduce the need for government regulatory intervention, recreational fisheries managers at Cronulla run a Fishing Event Management Program. This program involves managers and scientists working together to develop communication strategies and provide technical information and support for groups holding fishing competitions and events. The program encourages the adoption of Codes of Practice for fishing events, improved competition formats to encourage sustainable fishing and is a major source of scientific data. A large proportion of fishing clubs and competitions are based in Sydney.

Other recreational fishing programs which are central to the Sydney area include the Fishcare Volunteer program. This program coordinates over 300 volunteers (73 reside in Sydney) who help communicate messages about responsible, sustainable and safe fishing. Regional Education Officers already coordinate the volunteers based in regional areas. These Education Officers also coordinate the Get Hooked, It's Fun to Fish program. This program involves over 40 schools and 4200 students across the state, and is coordinated from Sydney to minimise travel and operating costs. The Fish Aggregating Device (FAD) program is also based in Sydney and is responsible for the deployment of 25 FADs each summer from Tweed Heads to Eden. Five of the FADs are deployed directly off Sydney. Over 90% of recreational fisheries management staff based at Cronulla and almost 100% of operating costs for these and other programs is funded from the recreational fishing trust.

Apart from the above fisher-stakeholders, the other (and most important) stakeholders in NSW Fisheries are those people who actually own these resources – the NSW public – the majority of whom live in Sydney. Removing our staff from Sydney will mean much poorer service to the general public and key media outlets, as well as the disintegration of key public-related programs run out of Cronulla. For example, we will not be able to produce the bi-annual "Status of the Fisheries Resources of NSW" report that is produced by Cronulla scientists, which leans very heavily on fish samples from the Sydney Fish Markets. This is the only mechanism the government has to report on the status of the state's publicly owned fish stocks. It is a requirement of our legislated commercial Fisheries Management Strategies to produce this report. Other examples of Sydney-based, public-good research projects include the Bather-Protection Shark Meshing Program and the Sydney Harbour Bull Shark Tagging Program.

Sydney is the transport hub of NSW, so that our state-wide projects can be executed cost-effectively and quickly for regional fieldwork and consultation. Further, our regionally-based clients/stakeholders (e.g., advisory committee members) can currently access Sydney quickly and efficiently from each regional location, minimising time away from their businesses. Requiring such stakeholders to commute to other regional locations will require stopovers in Sydney, extra flights and extra days away from their businesses.

It is our view that a likely outcome of the proposed changes is that there will be a major loss of community-based involvement in our statutory management and consultative processes that are so crucial to ensuring the work we do is relevant and delivering what our stakeholders and the broader community expect. Moving Commercial Management may be seen as a good decision by the commercial fishers living in and around Coffs Harbour but for all other commercial fishers it is unambiguously a bad decision. Moving Recreational Management to Nowra may be great for the very small number of fishers and peak body representatives in and around Nowra. For all other recreational fishing stakeholders it is unambiguously a bad decision.

If the Minister seeks to have the staff situated where the action is, we respectfully submit that Cronulla is, on balance, an ideal location.

Loss of Brand

The Cronulla Centre is a unique and iconic institution in terms of its scientific and fisheries management credentials, its heritage and cultural value. Fisheries research has been undertaken at the site for more than 110 years and it is the first fisheries (or indeed any sort of marine/aquatic institution) in the Southern Hemisphere. Today, the researchers at Cronulla are recognised as among the best in the world in their fields of fisheries science. To fisheries professionals, it is as iconic a location as the Parkes Telescope and ANSTO are to astronomers and nuclear physicists, respectively.

Cronulla is the "birthplace of fisheries science in Australia" and has become a locally, nationally and internationally recognised "brand" associated with leading-edge fisheries research. This "brand" will be lost forever if the site is closed.

The news about closing the Cronulla Fisheries Research Centre of Excellence is, in fact, causing something of an "international incident" in the world's relatively small fisheries scientific community, with many letters of support being sent to the Minister, seeking a revision of this decision (see Attachment 1 for some examples). This proposed closure will, no doubt, jeopardise the NSW Government's current bid to host the 7th World Fisheries Congress in 2016 in Sydney.

The entire Cronulla site is Heritage-listed, with several buildings and the aquarium facilities having separate listings. The site also had an aboriginal presence for approximately 8,000 years, with several significant aboriginal sites and middens on the property. We are also advised that it is the subject of a proposed aboriginal lands claim from the La Perouse Aboriginal Lands Council. The preservation and stewardship of these heritage and cultural values is deeply understood and respected by staff at the Cronulla site, and has been for decades.

Closing the Cronulla Fisheries Research Centre of Excellence and moving staff elsewhere will also cost the government significant media opportunities. In the last 5 years alone, over 200 media interviews, stories and documentaries were based on the work done at Cronulla, most in the mainstream Sydney and national TV, radio and print media (see Attachment 2).

Each year, the Centre hosts approx. 6 international delegations of MPs, Ministers, Consular staff and Ambassadors – who wish to consult on, or inspect, fisheries-related facilities (organised through the Commonwealth government Department of Foreign Affairs and Trade's International & Community Relations Office). In addition, Cronulla is a usual stop-over for any international fisheries professionals visiting Australia. Such delegations play an important role in promoting NSW internationally and establishing mutually beneficial relationships and will be lost if Cronulla is no longer available.

Loss of Expertise

The scientific staff at Cronulla, combined, have in excess of 500 years experience in fisheries research, more than 50 science degrees (including 19 PhDs and 1 DSc).

A survey of staff done this week (see Attachment 3) revealed that 96% of staff at the site could not re-locate due to a variety of very real personal family reasons (especially the need to care for children and aged parents), meaning that most of the experience and knowledge that exist at the site will be lost to NSW. Further, because such expertise and knowledge is simply not available at the relocation sites, the people and government of NSW will simply lose these things for many decades. Such a massive loss of expertise will have a negative impact on our ability to ensure sustainability of fish stocks and the information base underpinning fisheries management decisions, at a time when there are great challenges to the effective management of our resources.

If staff are relocated, there will be a major loss of benefits related to being located at the hub of scientific research and learning in NSW (Sydney): for example, formal alliances and routine interactions (e.g., lectures, seminars) with major universities (Sydney University, University of NSW, Macquarie University, University of Western Sydney, University of Technology, Wollongong University and the Sydney Institute of Marine Science) will diminish. Several universities rely on Cronulla to obtain federally funded University Linkage Grants – currently, the Universities of NSW and Sydney, Macquarie and University of Technology are receiving \$1.26 million in various grants due to their partnerships with scientists at Cronulla (we understand several letters from concerned academics have made this point). Also, Cronulla's proximity to the Sydney population, schools and universities facilitates education and mentoring of the next generation of natural resource scientists, managers, commercial and recreational fishers (e.g., our current supervision of 25 MSc/PhD students; and our "Science in the Suburbs" schools program for Year 11 students).

Cronulla has also been a major site for the training of Fisheries Professionals in Australia – many of the senior fisheries people in Australia have "cut their teeth" at Cronulla. For example the current Director of Fisheries Victoria began his fisheries career at Cronulla as did the current Director Fisheries Research in Western Australia and the head of Fisheries Research at CSIRO.

Cronulla is also the headquarters of DPI's Chief Scientist who is charged with high-level strategic work on scientific matters, enhancing the overall quality of science done in the department and administering the Research Scientist Classification for the entire NSW Public Service. All this work is Sydney-based.

The Government's pre-election policy on commercial fishing sets out an ambitious reforms program at a cost of \$16 million. The ability of this program to be implemented successfully will be greatly diminished by the loss of commercial management staff who will not be able to relocate. The expertise possessed by these staff members in terms of training (Science degrees, Masters degrees and PhDs) and corporate knowledge will be vital in delivering these reforms. Such expertise cannot be replaced and it will take many years for the Department to reach the same level of high service delivery.

Loss of Facilities

The facilities at Cronulla are amongst the most modern and effective for fisheries research in Australia. It is an old site (proudly, the original in fact) but certainly not "run-down". It is modern and state-of-the-art. It has the most modern computing technology and analytical software for fisheries research in Australia and is the envy of other state fisheries research agencies in terms of its stock assessment and status reporting work which is based around the Sydney Fish Markets. It is also the home base for the staff working on the Treasury-funded FishOnline system that stands to deliver unparalleled service to the commercial fishing industry and charter boat fishery operators – regardless of their location.

The government has invested a considerable amount of funding in the site over the past decade, including an upgrade of its Heritage-listed H.C. Dannevig Fisheries Laboratory to state-of-the-art standard at a cost of more than \$1 million (to mark the 100 year anniversary of the site in 2006). This lab is used by staff and university students to investigate the life history characteristics of key recreational and commercial species. These include the ages, rates of growth, mortality, longevity and reproductive dynamics of key species. This information is used to set size and bag limits, advise on other management tools and feeds the resource assessment process.

The site's Heritage-listed aquarium facility is unique in Australia due to its size and seawater quality and has also had a major amount of money spent on it in recent years with new pumps, pipes, filters, electrics, hypobaric chambers, etc. It is used by staff and university students to study our commercially and recreationally important fish species, including work on age validation and tag retention. The Australian Nuclear Science and Technology Organisation (ANSTO) at Lucas Heights and the Office of Environment & Heritage's Ecotoxicology Laboratory at Lidcombe rely on this high quality seawater for their work.

This aquarium facility CANNOT be replicated at the proposed alternative location (Port Stephens) because that location is in a mangrove swamp. For much of its history, in fact, the Port Stephens Research centre was called the Brackish Water Research Station. It has quite poor quality salt water – the water there is brackish, not marine – and therefore unsuitable for experiments on marine species. Whilst it would be technically possible (at great expense) to hold marine fish there, the results from scientific experiments on marine species (such as tag-retention studies, age-validation work, etc.) would be highly questioned by the scientific community because the fish can not be labelled as being held in close-to-natural conditions, they would be physiologically stressed, thereby compromising and invalidating the science.

To get anywhere near the quality and quantity of sea water currently used at Cronulla would require massive expense and the installation of major recirculation and filtration systems, augmented by trucks delivering water. The current water system at Port Stephens handles 40,000 L/day. At Cronulla this figure is 1.75 million L/day. The Port Stephens location is also a problem for staff as the drinking water is non-potable, it has limited access (a one-way bridge through the marsh) and little capability to expand.

The Cronulla Centre's library is the only Fisheries-specific library on Australia's eastern seaboard, has one of the oldest and most comprehensive fisheries research collections in the Southern Hemisphere, and services many universities and schools in the Sydney Basin. It houses an extensive and historic range of international and domestic journals and books (approximately 6,000 monograph titles, and 422 journal titles) and has all the latest inter-library loan technologies and search engines. It holds an archival record of all publications of the Centres' scientific staff since research began at the Centre over 110 years ago and supports the research activities of Cronulla fisheries staff, many visiting university students and international researchers. To move this facility to Port Stephens would isolate the many Sydney-based universities and school students from fisheries information.

Impacts on Community

The Cronulla Centre is the largest single employer in Cronulla with 152 employees (124 full-time equivalents (FTEs)) in 2010-11. 45 FTEs are scientific staff, 49 FTEs are involved in fisheries management and licensing and 30 are in DPI corporate services such as finance, training, administration, IT, etc. There are also 25 post-graduate students from many universities working at the Centre.

The Cronulla Fisheries Research Centre of Excellence is situated on the outskirts of Sydney in the Sutherland Shire. The regional community has embraced the Centre as an iconic feature of the region of 110 years standing and take pride in the status of the Centre as an internationally renowned fisheries research centre.

The Centre is a significant employer in the Sutherland Shire Region which has limited equivalent employment

opportunities. The Sutherland Shire is on the outskirts of Sydney with a daily commute of over 2 hours into the city centre and return for most residents. Many staff at the Centre, particularly those in the supporting roles, work at the Centre because it offers high quality local employment opportunities and has done so for generations. For many staff, due to personal family circumstances, the option to work in the CBD is not viable.

The local community, as expressed through the local council, local MPs and the petition in support of keeping the Centre open, have expressed strong support for the Centre and seek preservation of the Centre and the jobs they provide to the local community (these are not CBD jobs). Removal of these jobs from this region to other regions for no discernable benefit and at enormous cost seems counter-productive to the community.

Costs

Currently the Cronulla site costs little to run. There is no rent and maintenance costs are modest – especially because, in recent years, significant funding has been spent to modernise the site.

It is very difficult to estimate the immediate and ongoing costs of these moves so the below figures are very approximate.

We estimate that staff relocation costs (solicitor's fees, stamp duty, relocation pay, removalists, etc.) will be in the order of \$60,000 per person (x 152 staff) = \$9.1 million. If 90% of staff decline to move, the costs of paying out those staff will probably be double or triple that amount – with the loss of corporate knowledge and expertise incalculable.

A new laboratory will have to be built at Port Stephens – the new laboratory at Cronulla cost \$1 million 6 years ago.

The upgrades to the seawater system at Port Stephens will cost many millions of dollars as the water there is brackish – not marine – with the probability of ongoing trucking in of water.

Offices will need to be built, rented and/or re-furnished at Coffs Harbour and Nowra at significant up-front and continuing expense.

The actual moving of equipment, offices, files, the library, etc. is estimated to be in the order of \$1 million.

Conclusions

The announcement to close the Cronulla Fisheries Research Centre of Excellence has been done with no consultation with staff at the Centre or its major stakeholders. Contact with these stakeholders over the past week has revealed their dismay and disappointment at this lack of consultation. The announcement has also failed to identify alternative uses for this iconic site. The ultimate outcome of the proposed closure will be the loss of a vast amount of expertise in this very specialised field, at enormous cost in terms of payouts, relocation expenses, construction of new facilities, etc. which, in all likelihood, will not be used as the staff needed to use them will not move. Fisheries Research and Management are very specialist fields, with quite limited numbers of practitioners available anywhere. Because over 90% of the current expertise and knowledge embedded in the staff at Cronulla will not re-locate, and replacements are not available elsewhere, this relocation will, in fact, not lead to a relocation of services, but their abandonment.

Strategic partnerships with universities and collaborations among fisheries divisions will fall. If the Cronulla Fisheries Research Centre of Excellence is closed, science-based fisheries management in NSW will suffer – leading to major risks to the publicly-owned aquatic resources of the state and the high international standing that NSW now enjoys in fisheries research and management.

The staff at the Centre respectfully acknowledge the mandate of the government and the policy of the “decade of decentralisation” but submit that this decision regarding the Cronulla Fisheries Research Centre of Excellence is ill-conceived given the matters outlined above and is contrary to the governments overall policy agenda of making the state Number One again. We are already Number One in the country in fisheries science and management, and closing the Cronulla site will lose NSW this status. The staff suggest that there are many more appropriate strategies available to the government to achieve the decade of decentralisation that don't involve such a massive cost to the state that this decision involves.

We sincerely ask you, Minister, to re-consider and change this decision.

