

**Submission
No 60**

**INQUIRY INTO CLOSURE OF THE CRONULLA
FISHERIES RESEARCH CENTRE OF EXCELLENCE**

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Reverend the Honourable Fred Nile,
Select Committee on Cronulla Fisheries Closure
Parliament House
Macquarie Street
Sydney NSW 2000

RE: Closure of the Cronulla Fisheries Research Centre of Excellence

Dear Honourable Member Nile,

Thank you for the opportunity to respond to the closure of the Cronulla Fisheries Research Centre of Excellence (CFRCE). The present state government was elected on a wave of genuine support and promise. The fishing and scientific communities anticipated that there would be cuts and re-structuring, as there should be. Strategic decentralization of government is a sensible and noble goal, and is difficult to dismiss in general terms. Some sections of the CFRCE had no place at Cronulla and could be decentralized (e.g. licensing), although there is good case for co-locating government research and management as observed internationally.

On the other hand there are specific research needs which underpin local policy and law and can only be undertaken by government scientists or by tightly regulated consultants in consultation with the Minister. These issues particularly concern Sydney's recreational fishing, marine parks, shark meshing and associated shark research and the Sydney Fish Market. The majority of the recreational licenses (60%) are located in the Sydney area; the majority of swimmers and shark attacks are in the Sydney area; all the dioxin and PCB contamination of fisheries are in the Sydney area.

Science is an intensely social activity that cannot be conducted remotely via email and skype. There is a reason why the leading universities are based in large cities. Similarly, politicians need to meet centrally to network and debate, and scientists are no different. Imagine decentralizing Parliament House to Port Stephens – this may be described as 'blind decentralization' compared to 'strategic decentralization'.

My reply will concern 6 of the Terms of Reference:

b) Consultation? To my knowledge the university sector was not consulted, despite the universities having signed contracts for joint research under the ARC Linkage scheme, as well as the co-

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supervision of postgraduate research students. I have in my laboratory (www.famer.unsw.edu.au) 12 PhD and MSc students, of whom 4 actually work at the CFRCE and another 4 students use the facilities and are co-supervised by CFRCE scientists. University benefits from the interaction with “the real world” while the CFRCE students place their local scientific research into international credibility and into the larger ecosystem. General but abstract theories gain “street-credibility” at the CFRCE. Since the closure, one of the co-supervisors at CFRCE has quit; another has moved to Port Stephens; a student under my supervision has shifted to Batemans Bay; the vessels and staff associated with my 3 year, \$1M ARC-Linkage Project on the Offshore Artificial Reef have been shifted to Coffs. We have adjusted our activities over the past 6 months, but future collaborations and Federal funding will be more difficult (see next section)

c) Costs and benefits of the closure. The direct financial costs of quickly closing a well maintained facility in the immediate proximity of its constituents, and building a new facility elsewhere has been well made by others. The reasons provided by the minister included that the site was inadequate for their needs, but this has never been questioned before. The indirect costs concern the loss of a superb site for science and training; lost opportunity to meet with the public and the lost research opportunities. The CFRCE recognized the importance of training the next generation and actively supported their staff in taking higher degrees, and specifically via the ARC Linkage Program. Because of their local knowledge but international scientific rigor, 5 of my past or present students are staff at Cronulla, some at senior levels.

Over \$100M pa in research grants is awarded nationally by the ARC Linkage program (the companion ARC Discovery Program is about \$230M pa), where the ARC funding is matched by the industry partner (state agencies are considered as industry partners). I have had 5 such ARC Linkage projects with CFRCE. It is worth noting for this Inquiry the goals of the ARC-Linkage program, and how they can be achieved through blind decentralization.

“The objectives of the *Linkage Projects* scheme are to:

- initiate and/or develop long-term strategic research alliances between higher education organisations and other organisations, including industry and end-users, in order to apply advanced knowledge to problems and/or to provide opportunities to obtain national economic, social or cultural benefits;
- enhance the scale and focus of research in National Research Priorities;
- foster opportunities for researchers to pursue internationally competitive research in collaboration with organisations outside the higher education sector, targeting those who have demonstrated a clear commitment to high-quality research; and
- produce a national pool of world-class researchers to meet the needs of the broader Australian innovation system. “

d) Fisheries Management Act 1994. I am not familiar with the details of the Act, but appreciate at its core is the concept of “share management”, whereby all stakeholders have a share of the Total Allowable Catch. The degree of ownership and allocation depends on the value and type of fishery. Data is required to determine the TAC, derived from the Sydney Fish Markets and recreational surveys. It is essential for the government to maintain records on the harvest and fishing effort along with the impact of price, weather or regulations on harvest and effort. This is difficult data to collect, but the system based out of CFRCE was not broken and will not be improved via Port Stephens.

f) Loss of scientific expertise. One of my colleagues Dr Doug Rotherham has recently quit the CFRCE – he was a dedicated and enthusiastic scientist. His research concerned how to monitor estuarine fisheries by using the commercial harvest rates, and was federally funded by the FRDC. The fate of other scientists is still unclear. On the other hand, one of my colleagues has happily made the transition to Port Stephens. I accept that NSW cannot support or maintain all the expertise for specific issues. The state of Victoria seems to be in a similar position, and South Australia (SARDI) appears to be positioning itself to provide that advice with respect to lobster and abalone stock assessments, and possibly with the super-trawler activity on small pelagic fish stocks in the Tasman Sea.

g) Impacts on stakeholders. Much of the CFRCE's research was funded federally (FRDC) or by the Recreational Fishing Trusts. Communication is vital to ensure the Trust is satisfied with the research. With blind decentralization of CFRCE, the people of Sydney are definitely worse off by receiving less attention, and the scientists at Nowra and Port Stephens must now make a 3 h commute to Sydney to meet with their funding partner and communicate their findings. It also exposes the government and the Minister when their key scientists on topical issues such as recreational fishing, re-stocking, artificial reefs, shark attacks or marine parks or dioxins are either unemployed or 3 hours away.

I have colleagues in the National Parks and affiliated government departments, which are mostly decentralized, observe that they lack a central voice. Their advice to the media was sometimes disparate or in conflict, compared to advice from Cronulla on fisheries which seemed to be consistent (even if they did not agree with it, they knew where DPI stood).

i) Impact on heritage values. The site does have heritage significance in the flowing seawater ponds built by the Norwegian scientist Dr Harold Danniveg in 1905. It also has national importance as the base for the CSIRO marine labs up until 1982; and I understand it has considerable Aboriginal significance. I wish the Inquiry to note that a successful seawater facility for the husbandry of marine life (phytoplankton to fish) requires surprisingly high standards of water quality. Simple estuarine water, or recycled seawater only works for a while, and for only some species. Even mild traces of contamination may be tolerated in some cases, but can ruin chances of spawning. A functioning seawater facility is essential to modern marine science, which was the reason why our students travelled to Cronulla. The facilities at SIMS are not big enough to handle large mature fish.

For over 100 years the CFRCE has a local and international reputation for excellence in marine science. It is possibly that future state governments will recognize that the people of Sydney have been short-changed. Australia's largest city needs a place for primary and secondary education, and research into Sydney's manifold marine problems of ports and harbours: ecotoxicology, recreational fishing, artificial reefs, marine parks, shark meshing and shark movements, beach erosion. The determined rush to close the site at all costs must be based on more than decentralization.

I hope that the Inquiry will recommend that a cost-effective solution is to maintain some scientists at Cronulla, to deliver on legislative research needs, and to diversify its activities (schools, community groups, universities, Water Police). I wish your committee well on its discoveries.

Yours sincerely,

Iain Suthers