

**Submission
No 31**

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

Organisation: Sydney Institute of Marine Science

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LEGISLATIVE COUNCIL SELECT COMMITTEE ON CRONULLA FISHERIES CLOSURE

SUBMISSION BY THE SYDNEY INSTITUTE OF MARINE SCIENCE

This submission is from The Sydney Institute of Marine Science in response to ToR 1(c).

What is The Sydney Institute of Marine Science (SIMS)?

The Sydney Institute of Marine Science (SIMS) was founded in 2005 as a partnership between Macquarie University, the University of NSW, the University of Sydney and the University of Technology, Sydney. The partnership is enhanced by collaborations with several state and federal government departments, the Australian Museum, the University of Wollongong and the University of Western Sydney.

SIMS is located at Chowder Bay, Mosman, in a series of buildings that are leased from the Sydney Harbour Federation Trust. Over the past two years, approximately \$20 million has been provided by the Commonwealth and NSW Governments and private donors, to up-grade SIMS' laboratories, offices and aquaria facilities. SIMS' facilities for research are now among the finest in the world, and include a PC2 (biological containment level 2) running seawater research aquarium, the only one in Australia. SIMS also now has aquaria facilities that are capable of being operated under controlled temperature and controlled carbon dioxide levels, to facilitate studies of the potential impact of global climate change on marine biological systems.

SIMS is uniquely positioned both in a geographical and a structural sense to significantly advance research into our marine environment. Geographically, because SIMS is located on the Southeast Australian seaboard, a climate change hot spot, and structurally because the collaborative research profile of the Institute harnesses the strengths of NSW's leading marine scientists and universities. This is the best model for world class marine research.

SIMS plays a vital role in producing the next generation of marine researchers and managers by facilitating the research of PhD students and post-doctoral fellows, and through undergraduate and postgraduate teaching at the Institute. Postgraduate opportunities offered include the SIMS' Master of Marine Science and Management and SIMS' Doctoral Fellowships which are awarded annually. SIMS has over 100 associated scientists who do research across a broad spectrum of the marine sciences, encompassing a broad range of the challenges facing us in our interaction with the marine and coastal environments.

SIMS is now well established as an internationally recognised marine research institute. Its fields of research include for example oceanography, as the NSW node for the Federally-funded Integrated Marine Observing System (IMOS), climate change science, focussed particularly on changes occurring in the physical and biological characteristics of the nearby East Australian Current, coastal geomorphology, marine microbiology and the impacts of urbanisation on Sydney Harbour.

SIMS and Cronulla

Since the closure was announced, an agreement has been reached between SIMS and NSW DPI for 15 personnel to be re-located from Cronulla to SIMS. These personnel comprise 12 research personnel and 3 fisheries management personnel.

This co-location of NSW DPI and SIMS personnel is a very exciting development, and one which is expected to bring significant benefits to both SIMS and NSW DPI. These benefits include:

1. Research personnel being re-located to SIMS include those people whose research is directly based in and around Sydney and Sydney Harbour, *viz* research on sharks, fisheries resource estimation and stock assessment, and lobster resource studies. This research expertise adds significantly to the critical mass of fisheries knowledge that is based at SIMS, which will strengthen the overall research effort.
2. Fisheries management personnel being re-located to SIMS will add substantial hands on and commercial knowledge of fishing to the knowledge base at SIMS, thereby helping to inform future research, as well as provide a direct pathway for translating research outcomes into commercial fisheries management.
3. As indicated above, the recent up-grade of SIMS has led to world class research facilities which are not, and were unlikely ever to be available at Cronulla. For example, the new PC2 laboratory will allow cutting edge molecular biology and genetics - critical modern tools for understanding stock assessment, biomonitoring and pathogen detection - to be done in the context of near natural running seawater environments. NSW DPI Fisheries personnel will be able to access those facilities, thereby improving the productivity and scope of their research.
4. As indicated above, the SIMS campus at Chowder Bay houses many junior research personnel, as well as masters' students and conference attendees. By being co-located at SIMS, NSW DPI personnel will have the opportunity to see many young scientists at first hand, thereby improving recruitment opportunities.
5. Co-location also provides an enhanced opportunity to develop collaborative research grants that combine the expertise of the academic staff and student body at SIMS with the expertise of fisheries research and management specialists from Fisheries NSW.

Thank you for the opportunity to provide this submission.

Dr. John Keniry AO, Chairman of the Board
Professor Peter Steinberg, Director and CEO