

Pre-amble

In answering the following questions raised at the Parliamentary Hearing on August 13 it should be emphasised that:

- I. All operational costs noted in the following answers are estimates only and based on the costs of existing operations. Capital costs for the Sea Sanctuary and retaining walls for the Coffs Harbour site need to be verified with qualified engineers and sea pen specialists.
- II. Greater liaison with local businesses, Coffs Harbour residents, the Aboriginal Land Council and the Jetty Foreshore Committee needs to be undertaken to gain an understanding of the true level of support for a Sea Sanctuary and marine rehabilitation complex at the proposed location in Coffs Harbour.
- III. The answer to Question 3 outlines DMCP's preferred position and most cost effective option for relocating the 3 dolphins. To incorporate the proposed sea sanctuary with existing infrastructure to create a multi-site, world leading Rescue and rehabilitation complex in Coffs Harbour that will ensure ongoing (if not increased) tourism and investment into the area, increased functionality and ongoing return on the investment required. This proposal creates more than just a home for the 3 dolphins in question as it retains the existing expertise of the current staff with a potential increase of employment into the area and ensures the ongoing health and welfare of Zippy, Bella and Jet.

Supplementary Questions from Hearing

The following are the questions that have been posed to Dolphin Marine Conservation Park (DMCP) by the Hearing Committee and DMCP's response to those questions.

- 1. The Committee's terms of reference refers to the 'welfare' of exotic animals and cetaceans.

 Do you believe the term 'welfare' is satisfactory?
 - (i) If so, how should it be best defined in legislation?
 - (ii) If not, what would be a better term, and is it used in any other jurisdiction?

Response:

DMCP believes that the term *welfare* <u>is</u> appropriate however, defining it in legislation will need to be approached very carefully to ensure that it applies to and allows for all instances of animals under human care:

- 1. Legacy cases where animals may have been taken from the wild (illegally or legally in the past) and are still under care, unable due to habituation to be released back to the wild.
- 2. Animals that have been rescued, rehabilitated but as a result of the extent of their injuries would not survive if returned to the wild.
- 3. Animals that have been rescued and where rehabilitation has been an extended process, such that the animals have habituated to human care and can no longer be released back to the wild
- 4. Animals that have been born under human care and so have no knowledge of how to survive in the wild.

The Collins and Oxford dictionaries define welfare as:

The **welfare** of a person or group is their health, comfort, fortunes, happiness or wellbeing in general.

With animals, "happiness" is a much touted but legally difficult to prove term.



The <u>World Organisation for Animal Health's</u> definition of animal welfare is "the physical and mental state of an animal in relation to the conditions in which it lives." ¹

The <u>RSPCA</u> considers that the welfare of an animal includes both physical and mental states. Ensuring good animal welfare goes beyond preventing pain, suffering or distress and minimising negative experiences, to ensuring animals can express their natural behaviour in an enriching environment, feel safe and have healthy positive experiences with a good quality of life. Thus providing good animal welfare means providing animals with all the necessary elements to ensure their physical and mental health and a sense of positive individual wellbeing.

Zoos and Aquariums Association of Australia and New Zealand (ZAA) of which DMCP is an accredited and financial member, is an advocate of and promotes the <u>5 Domains Welfare</u> model - globally recognised as the gold standard in animal welfare. Science has now learnt that welfare is not just as simple as providing an animal with its basic needs of food, water, shelter and enrichment as per the previously advocated and widely practiced <u>4 Freedoms of Welfare</u>.

We now know that mental health is extremely important for optimal animal welfare and therefore the 5 domains approach promoted by ZAA was created. The 5 Domains not only takes into consideration the 4 main physical categories; <u>Nutrition</u>, <u>Health</u>, <u>Environment</u> and <u>Behavior</u> but adds a 5th category combining all 4 categories to determine the overall mental state of the animal.

It is therefore critical that any legislative definition of the term welfare as it pertains to animals, as well as allowing for the <u>reason</u> the animal is under human care, takes all these <u>domains of welfare</u> into account.

In working with ZAA who in turn work with many zoos and aquariums around the world, I believe the following sets out a great framework for a definition for welfare of animals under human care:

Animal welfare refers to a state that is specific for every individual animal; it is how the animal experiences its own world and life through its association with pleasant experiences such as vitality, affection, safety and excitement or unpleasant experiences such as pain, hunger, fear, boredom, loneliness or frustration.

Many of these experiences can be generated through features of its diet; environment; physical health and fitness (including injury and disease); social environment (including interactions with humans); and its ability to fulfil the species specific and individual animal's motivations to have positive physical or social experiences. An animal's welfare state can be influenced both positively and negatively by all parameters of its living environment with husbandry practices being only one of them. The ability to have species specific choices and individual control over life experiences make for positive animal welfare for each individual animal.

While this is not necessarily a definition for welfare as such, it does provide the considerations that need to be taken into account when assessing the welfare of any particular animal under human care.

Furthermore, DMCP would advocate that a requirement of any institution, wildlife sanctuary, zoo or like organisation maintaining animals under their care is that they be accredited using the 5 Domains Welfare model as a critical component of that accreditation, in order to retain their license to operate.

 $^{{1\}atop https://www.oie.int/fileadmin/Home/eng/Health_standards/tahc/current/chapitre_aw_introduction.pdf (accessed 05-12-19)}$



2. Has a feasibility study been commenced into the creation of a sea-sanctuary/ sea-pen for dolphins at the Dolphin Marine Conservation Park at Coffs Harbour?

Response:

A feasibility study into whether a sea sanctuary is a viable option as an alternative location for the remaining dolphins at DMCP was commenced in July 2018 as a joint venture between DMCP, Action for Dolphins (AFD) and World Animal Protection – Australia (WAP). With the ongoing need for the DMCP team to continue to care for, feed and quickly relocate the animals should inclement weather approach, the harbour area at Coffs Harbour and in particular, the Corrambirra Point area was suggested as the most likely option. Proximity to the existing DMCP infrastructure was deemed essential.



Source: Google Earth ™ 2018 *Proposed Coffs Harbour Site of Sea Sanctuary*

An alternative location has been identified at Nambucca Heads – approximately 40 minutes' drive South of Coffs Harbour and while the proximity to DMCP is not ideal, it does still allow reasonable access. There are two potential areas for a Sea Sanctuary at Nambucca – the Nambucca River and the man-made lagoon adjoining the White Albatross Holiday Park. The lagoon is Council owned but is used extensively by patrons of the Holiday Park and so public acceptance of this location would be needed as access to the general public for swimming in the lagoon with the dolphins would no longer be available should this site be deemed appropriate.

There has been no viability study yet commenced at the Nambucca Heads site and so factors such as boat traffic movement (particularly in the river), water quality, audiology studies, tidal movement (again, particularly in the river), political and public acceptability and costs – structural and ongoing operational – are yet to be determined.





Source: Google Earth ™ 2018 Proposed Nambucca Heads Site of Sea Sanctuary



Views of White Albatross Holiday Park Lagoon: The lagoon is flanked on one side by the cabins of the holiday park with the other side separated from the sea by bush and dunes.

(a) Who approved the study being carried out? What were the specifications provided to the consultant about the proposed enclosure?

Response:

The study was commissioned by AFD in agreement with DMCP (at that time the trading name was Dolphin Marine Magic) and WAP in June 2018. Manly Hydraulics Limited (MHL) who had previously conducted work in the harbour in relation to the existing break walls was contracted to carry out the work following discussions with all 3 parties. Confidentiality on results has been agreed to by all parties.

The Scope of works that was provided to MHL is attached. While it was initially quite general in context and expectations, it was expanded on at several progress meetings as potential locations were identified. There were no specific dimensions provided to MHL as it was expected that they would provide more expertise with their understanding of the harbour, its water movement and



any forward planning that may be in the early stages of discussion with parties already involved in the Jetty Foreshore Master Plan.

(b) Who is carrying out the study, and when is it expected to be completed?

Response:

Phase 1 of the study was completed with the report issued in July 2018. Because of the history and extensive work MHL had conducted in the harbour area previously they had extensive knowledge of and vital information around water movement that could be incorporated into the study. The Phase 2 report (attached) was issued in February 2019. Both initial studies were conducted by MHL.

Completion of the feasibility study has been stalled due to lack of funding.

Feasibility Study progress to date is as follows:

- MHL Wave Action Survey, Stage 1 and Stage2: <u>Completed with limitations</u>.
 - The area inside of the eastern breakwater has potential as a Sea Sanctuary location.
 Analysis of wave data in this area and determination of the required structure to make this location secure would be desirable.
 - O General C-Well assessment on welfare of Dolphins. <u>Completed with positive results.</u> Note: Additional updating of this work is required to ascertain what, if any, impact on the general demeanor and psychology of the remaining dolphins has occurred with the passing of Bucky and Calamity. Some initial indicators have been observed indicating that a positive restructure of the hierarchy of the pod has taken place and plans have already been made to have Dr Clegg return to DMCP for further observational studies.
 - The welfare assessment within the Multi-Criteria Analysis (MCA) was conducted without appropriate understanding of dolphin behaviour. To make the MCA accurate, incorporation of the C-Well data results and predictions into proposed models is required. To be completed
- Following agreement on a location and acceptance of additional wave data of any new potential location(s):
 - o Water Quality Analysis: Completed and
 - o Acoustic Testing: *To be completed.*
- Draft designs and architectural renders of the facility to promote the concept of the proposed sanctuary to government and community agencies: <u>Completed</u>
- Identification of appropriate government bodies and stakeholders in Jetty Foreshore Development and approaches made to gain support: <u>Commenced but to be completed.</u>

Following the generation of public and political support:

- Financial modelling for:
 - Construction: <u>To be completed</u>
 - o Operational costs including 24-hour security: To be completed
 - Maintenance costs: <u>To be completed</u>
 - o Transportation of animals: <u>Desensitisation to slings underway but to be completed</u>

A trial sea sanctuary will then need to be constructed to enable additional C-Well Welfare assessments to be conducted on the dolphins to be relocated: *To be completed*



(c) How is the study being funded, and how much if any is still required to finalise the study? What government agencies have been approached?

Response:

The study on the Coffs Harbour site has been funded to date by AFD and WAP. DMCP has been providing its expertise as its contribution. With the COVID-19 outbreak funding has stalled. Government at a Federal level has been approached for additional funding to complete the studies, but any contribution to date is still to be advised. Local Council has also been approached but again, there has been a lack of interest.

It is estimated that to complete the study on the Coffs Harbour site a minimum of \$200,000 but up to \$250,000 would be required. This figure would cover the acoustic testing (Initial quotes of \$100,000 have been received for this to be conducted), further C-Wel assessment of the remaining dolphins, finalisation of architectural plans and any additional water quality testing that may be required. It would also cover incorporation of updated C-Wel studies into the final modelling of the proposed enclosure.

What has not been estimated is:

- ✓ The cost of construction of a temporary (trial) sea sanctuary to facilitate additional C-Wel assessments of the dolphin's reaction to and potential for permanent relocation to a sea sanctuary environment.
- ✓ The cost of studies on an alternative site at Nambucca Heads.

 Note: This alternative site was proposed as a potentially more cost effective option, given that initial observations are that a break wall would not be required, however this needs more investigation. There is acknowledgement that the location from a proximity to the DMCP infrastructure perspective, is not ideal and security may be a concern.
- ✓ All operational and supporting costs associated with an alternative site at Nambucca Heads.
- (d) What is the expected range of the capital cost of the enclosure? How will it be funded?

Response:

The full costs are yet to be determined as it will rely on what is required to guarantee safety and security of the animals, maintenance of the enclosure infrastructure and what if any other infrastructure and staffing is required at the site.

It has been <u>roughly</u> estimated that construction of a sea sanctuary at the proposed location in Coffs Harbour would be in the vicinity of **\$10 to \$15 million**. As there is yet to be any potential for forthcoming State or Federal support a finalised, itemised costing has not been developed. However, to ensure ongoing care and security for the dolphins and the provision of a public information and education facility, it is proposed that some additional infrastructure would be required, potentially increasing the overall cost to \$20 million. It should be emphasised that there needs to be more budgeting work and input from engineers, architects and sea-pen specialists for these figures to be refined.

The study has been funded to date from AFD and WAP. As mentioned in 2 (c) above government at both Federal and Local levels have been approached for additional funding but none has been forthcoming.



(e) What is the expected range of the annual recurrent cost of the enclosure? How will it be funded?

Response:

Recurrent costs of the sea sanctuary alone, housing 3 dolphins and providing an Information Facility on-site will comprise:

 Maintenance of the netted portion of the enclosure, which will attract crustaceans needing to be regularly removed for the safety of the dolphins and any compromised structure repaired.

Estimated costs: \$80,000 pa

• 24 hour manned security patrols and surveillance cameras to deter trespassers.

Estimated cost: Equipment Installation: \$50,000

Maintenance: \$4,000 pa Wages: \$130,000 pa

• Feeding, enrichment and care for the dolphins to maintain optimum welfare. Estimated cost. Feed, Veterinary, Medical and drug supplies: \$80,000

• Wages:

Estimated cost: \$450,000

• Maintenance, Occupancy costs of Operations and Information centre, rates, utilities,

signage, etc.

Estimated cost: \$200,000 pa

Total Recurring Costs: \$914,000

It is proposed that this facility be government funded with public donations from crowd funding and visitation fees.

Please see proposal outlined in Question 3 following as an alternative structure.

3. If the exhibition of cetaceans performing at the DMCP ceases, what is the estimate of the annual funding that will be forgone to operate animal marine rescue and rehabilitation services at the Park?

How will this funding be maintained, and what will be sources of the funding?

Response:

Should the exhibition of cetaceans cease, we estimate that most, if not all income to the park will be lost. As visitors to DMCP contribute significant tourism income to the local community (approximately \$15 million annually) this too will be lost.