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Port Stephens

INON

1st December 2012

Mr Chris Ritchie Manager Major projects Assessment NSW Planning and Infrastructure GPO Box 39 Sydney NSW 2001

Marine Finfish Cage Trials

Dear Mr Ritchie,

RE: Port Stephens Application SSI 5118

Thank you for the opportunity to comment on the Environmental Impact Statement and Management Plan relevant to this proposal. Port Stephens Tourism Limited is the peak tourism marketing body responsible for managing all tourism related business in this region. With over 200 commercial member operators, we work closely with Port Stephens Council and Destination NSW the State Government's tourism funding body. We have looked at the EIS for the proposed trial fish farm and consulted with a number of our members including those who have direct interests in the waters being proposed for locating the suggested Fish cages and we have some very real concerns for this proposal.

Port Stephens Tourism Limited has an adopted protocol for assessing all new businesses that might relate to or in any way affect tourism in this region (see paper: Pathways to Sustainable Tourism in Port Stephens).Our review of this proposal in the light of the State Governments plan to double tourism to the region by 2020 has highlighted the dilemma tourism faces to increase our regional visitor revenue stream despite competitive pressures on the natural environment, the primary source of income for Port Stephens. There is clear controversy within the scientific community as to whether open ocean Aqua culture is in fact environmentally sustainable and with Port Stephens now the largest Marine Park in NSW there is a firm State and Federal Government commitment to protect the marine environment against unsustainable usage.

No matter how thorough the related EIS appears, deep reservations still remain as to whether this project will enhance any aspect of this community. Its very presence and potential for further growth might in fact cause some lasting damage to the publicly perceived pristine nature of our offshore waters of this iconic coastal region and a subsequent negative impact on our tourism economy could result.

We have set out the following reservations and would like to be kept in consultation.

Yours sincerely Michael Aylmer Chairman Port Stephens Tourism Limited



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Marine Finfish Cage Trials: (Application SSI 5118) Port Stephens Tourism Limited Submission

MAIN CONCERNS:

Humpback whale entanglement and avoidance: The location of the proposed cages is within the north-south migratory path of the Humpback whale. Three companies operate Whale watching cruises from Nelson bay from mid-May to mid-November and with accompanied spend on accommodation and services the Whales represent a significant component of Port Stephens Tourism's winter and spring attraction to the region. Clearly these vessels will not be able to operate in the waters annexed and you should be aware that more than \$5 Million of tourism revenue is generated each year as a direct result of the Humpback whales migratory visits.

In the latter part of the season in particular, Humpback Females with new born calves travel close inshore, often through the areas proposed for the cages and whale entanglement on the west coast of Australia in offshore Aquaculture farms is well documented so we must assume it is a very real possibility that at some time entanglement would occur.

In 2001, Port Stephens Pearls proposed 62 hectares of open ocean farms but this aspect of the proposal was withdrawn (Nov.20-2003) after they were shown to be incompatible within the path of migratory whales. In the event commercial finfish farming is permitted in Providence Bay we must also assume that it will reach far beyond the 20 hectares and 8 cages of this project and we know there is already another 30 hectare site approved within the same area so the identified risks associated with location in the migratory path of increasing whale populations will escalate. This represents an entanglement hazard as acknowledged, (EIS-p187).

Diving disturbance: A well-used dive site named the SS. Oakland is located close to the proposed cages and our dive operator members have expressed concern of an increase in risks from predators and the potential increase in water turbidity within the region. Port Stephens Tourism Limited has also for some time been exploring with the Navy and the local Marine Parks Authority the option of creating another major deep water dive site in the same area as the proposed cages utilising a redundant naval vessel similar to that scuttled off Avoca beach on the Central coast.

Disturbance to Short beaked Common dolphin and subsequent concerns for "Swim Program": Two of our members combine to operate a permitted **"Swim with Dolphins activity" with the Short** Beaked Common dolphin that is resident to this area. We have been informed that research

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regarding Dolphin movement around fish farms conducted by scientist J.Mann in West Australia noted that *"females and calves often change course by several hundred meters, apparently to avoid swimming through lines,"*(page 218 Marine mammals Fisheries, Tourism and Management issues. Nick gales, Mark Hindell and Roger Kirkwood by CSIRO publishing). Little is known of the movement of this species in this area but Dolphin Swim Australia Pty Ltd is conducting a scientific research project on these animals and we are assured they use the proposed area extensively.

Bottlenose dolphin area avoidance: A population of between 40 and 50 resident Bottlenose dolphin Tursiops Aduncas range between Broughton Island and Yacaaba headland, the proposed site is an area of their current usage.

Threat to Southern Fur Seals: A small population of Fur Seals probably New Zealand Fur Seals have for some few years been observed hauling out on the northern end of nearby Cabbage Tree Island from June to October. These animals form a part of the winter commercial offshore cruises focus and these animals will have a keen interest in the fish inside the proposed cages, the small population may also become vulnerable to increased predation as a result of the likely increase in the Shark population attracted for the same reason to the cages.

Predation from sharks: It is acknowledged (EIS-p189/190) that naturally occurring protected native species, Great White sharks, Australian and New Zealand Fur seals, and sea birds will be attracted to fish cages and comprise an on-going and increasing cost in predator deterrence. The attraction of extra sharks to the area currently used by our members is of concern. Let's **Go Dive and Feet First** Dive as well as Imagine Cruises and Dolphin Swim Australia PL all use the waters close by the proposed cage location for snorkelling and Scuba and Dolphin Swim Australia has expressed a concern that this is specifically an area where they find Short Beaked Common dolphin, the focus of their **"Dolphin Swims". Any shark observed close to the swimmers means they have to stop and pull** people out of the water.

Hawks nest beach already is noted for its population of Great Whites from September to February and the perception of an increase in Shark activity always has a negative affect understandably on beach usage and swimming and snorkelling.

Wild-fish as imported stockfeed: There is a fundamental problem with finfish aquaculture as it is currently practiced. The continuing importation and use of wild-fish stockfeed is clearly an ecologically unsustainable feature of finfish farming together with a high-risk factor for the potential introduction of pathogens into naturally occurring local fish stock and species, particularly given the changes in seawater temperature and chemistry. These changes make modelling transmission of



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pathogens into the natural system difficult to model based on current knowledge and understanding of the system. We are aware of the significant progress in alternative stockfeed sources and while the risk of introduced pathogens is reduced, a risk nonetheless still exists invoking the need to apply the precautionary principle in such developments. The pathogen issues could be mitigated with land based finfish aquaculture, but this would still not address the energy conversion ratio issues.

Unsustainable use: Finfish aquaculture will remain unsustainable until a better energy conversion ratio is developed. Ecological sustainability in finfish aquaculture is dependent on the aquaculture system producing a higher ratio of 1:1 weight of farmed product against the input of wild-fish feedstock. The current rule of thumb for energy conversion rates for relatively low energy species is around 3:1ratios and for higher energy species (kingfish, tuna etc.) it has been reported to reach ratios of +/- 10:1 i.e. 10 kg of wild-fish stock feed to produce 1 kg of farmed fish product. In no way can this be deemed ecologically sustainable nor a viable option for global food security.

Chemical, antibiotic and faecal discharge: The EIS (p178) – "A risk assessment will be used to evaluate exotic pathogens and pest hazards if any stock or equipment is imported from other states..." This is welcomed but the marine environment can be devastatingly unforgiving in the event of accident or chemical over-use. Particularly since over 100 bacterial species (EIS-p167) are linked to diseases in marine-based farming. The chemicals in use are likely to include (EIS-p163): Chemicals and therapeutics that include anti-foulants, fertilisers, disinfectants, anti-bacterial agents, paraciticides, feed additives, anaesthetics and breeding hormones. At a feed rate of up to 10:1, over 9 kilos of faecal matter will be discharged for every 1 kilo of fish produced. We are aware that over a long period of time there will be inevitable massive benthic pollution should this trial project move into a commercial phase. The Derwent river salmon farms in Tasmania are a case in point. Coastal currents will no doubt have a dispersal affect but this might simply move the pollution to neighbouring islands and the popular tourist beaches off Hawks Nest.

Water (EIS-p166), is a good medium for unintentionally transferring chemicals into the environment however, there is too much reliance on the capacity of sea water to diminish and disperse the toxicity of chemicals, antibiotics, faecal discharge and therapeutics. The solution to pollution is not always dilution and the risk of there being impacts on local wild stock exists, again calling for a precautionary approach. We agree it is inevitable (EIS-p166), chemicals will reach and interact with near and intermediate environments, which is true of marine-based aquaculture but avoidable with land-based finfish aquaculture.



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Summary:

The proposal as presented by DPI Fisheries is as an isolated **"trial" primarily to support the** threatened Mulloway species of fish, we are aware however that there is already another approved Aquaculture lease in the region and possible plans exist to extend further fish cages northwards towards Broughton island if this trial is considered feasible. The intention of this trial is not simply to remain a small isolated research project and we must assess it on its potential to pave the way for a much larger commercial enterprise.

As a consequence we have real concerns that although Mulloway will be trialled to begin with, ultimately King Fish or Blue Fin Tuna will become the primary fish commercially farmed on this site. With the vast inequity in feed to produce ratio and subsequent discharge of hundreds of tons of faecal matter into the pristine offshore waters, the potential exists for this concentrated effluent and other allied non-natural chemicals and pesticides and fish born diseases to move into the natural environment. Despite the suggested rigorous environmental monitoring program, there is a risk that not just tourism could be affected but the long term sustainability of the local wild fishery itself might result and if this was to occur it is doubtful that anything could be done to reverse this. A case in point being the collapse of the wild salmon fishery in British Columbia, Canada and a subsequent ban of Salmon Aquaculture farming across the border in Washington State US. A consensus of science concluding the caged farms were to a large extent directly responsible for the demise of the wild fishery through the spread of pathogens.

We also note that a commercial fish farm in the same area less than a decade ago failed after several years of operation and the proponent admitted afterwards that the repetitive breaks in gear and costs involved from extreme weather in the open ocean and the subsequent loss of fish made that project unviable. It is still highly doubtful that cages could be engineered to sustain the occasional near cyclonic storms that this coastline can experience so loss of fish will doubtless be a part of any offshore project in the same area.

Port Stephens Tourism Limited has difficulty seeing the compatibility of this project with the visitor's perception of this region as offering pristine waters and beaches and natural vistas unaffected by any suggestion of industry. Port Stephens and its coastal waters is in fact a naturally beautiful icon of Australia's coastline and a National asset. The annexing of any of its public waters currently used by hundreds of recreational boaters as well as a number of commercial tourism operators is difficult to justify.



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The potential entanglement issues for marine mammals and subsequent increase of human risk issues resulting from the attraction of predator species are all clearly problems that would have to be contended with. The question now is whether this new industry would truly be one that is both environmentally sustainable and compatible with an established tourism industry currently generating more than \$400 Million a year. We would suggest the precautionary principle might be applied here.

Sincerely

Michael Aylmer Chairman Port Stephens Tourism Limited

