

9 Fihelly Street
Fadden, ACT, 2904
13 November 2013

34 Plantation Point Pde.
Vincentia, NSW, 2540

Department of Planning & Infrastructure, GPO Box 39, Sydney, NSW 2001

Dear Sir or Madam,

Commercial Shellfish Aquaculture Leases, Jervis Bay, NSW

References:

- A. NSW Department of Primary Industries,
Commercial Shellfish Aquaculture Leases, Jervis Bay, NSW,
Environmental Impact Statement (EIS).
- B. Response from the Vincentia Ratepayers Association dated 3 November 2013.

Jervis Bay offers a unique environment on the NSW South Coast, essentially undisturbed. Apart from restrictions regarding Commonwealth waters reserved for the use of the Navy, access is open to local residents, and to visitors from elsewhere in Australia and overseas. 'Eco-tourism' is a recent commercial development, and can be justified because it makes the natural beauty of Jervis Bay accessible to a wider group of people of all ages.

As a local resident and ratepayer, a member of Vincentia Sailing Club, and a keen sailor and kayak paddler, I have a genuine appreciation for the natural tranquillity that Jervis Bay offers, particularly for a quiet early-morning paddle in the area of Vincentia and Plantation Point.

The dilapidated rafts used in former times for shellfish aquaculture at Vincentia presented an obstruction and navigational hazard to local sailors and paddlers. Their removal around 2008 was a significant improvement in terms of water access for recreational sailors and paddlers.

I have read the Environmental Impact Statement at Reference A. At 290 pages, it is a lengthy document. However, ultimately it is a disappointing document and inappropriately named. Rather than being an 'Environmental Impact Statement', it reads more like a one-sided argument in the affirmative, and a proposal for 'Environmentally Sustainable Development'. This flaw exposes a fundamental conflict of interest, because Fisheries NSW is an advocate for the development of the fishing industry in Australia, and this is evident in the document.

Criticisms include the following points, each of which will be addressed in a separate Annex:

1. Need for aquaculture is assumed, and the 'do-nothing' option is dismissed;
2. Argument is based on the claim that Jervis Bay Marine Park allows aquaculture;
3. Argument is based on a historical instance of aquaculture, that fell into dis-use;
4. No independence or impartiality is evident in the preparation of the EIS;
5. Proposal is 'exclusive' of the broader community; and is re-inforced by 'Security'.
6. Community 'consultation' appears only to have been 'information distribution';
7. Consultation has already included commercial Lease Operators and Investors;
8. Risks and Consequences are rated-down, with mitigation advocated in support;
9. Technical consideration of the impact of anchors and mooring chains on the seabed, particularly the effects of 'scouring' due to system dynamics, is inadequate; and
10. Operational risks are discounted as being the responsibility of the 'Lease Holder'.

The EIS includes a Risk Assessment prepared by Fisheries NSW, but this is regarded as unsatisfactory because, in a number of examples, the “Consequences” are either under-rated, or alternatively, the consequences are theoretically mitigated by placing obligations on the “yet-to-be-selected-Lease-Holder or Operator”. Whether this risk mitigation can be achieved in practice will depend on a range of factors, including legal, commercial and technical. There are instances involving environmental degradation where Operators have not complied with legislative, policy or commercial or managerial requirements, for various reasons.

As a consequence of the unsatisfactory nature of the Risk Assessment, the Conclusions are also unsatisfactory. The Conclusion (inappropriate/unsatisfactory) on pages 244-245 states:

“Potential impacts were assessed as not significant when considered in the context with the small scale of the Commercial Shellfish Aquaculture Leases (0.4% of the bay), the appropriate stocking densities, the minor increases in vessel movements and vehicular traffic and environmentally important areas (e.g. reefs, seagrass beds and critical habitat), as well as the use of design features that will minimise visual impacts. Noise generated will predominately be characteristic of the area and service vessels will be similar to existing vessels that use Jervis Bay.

Potential impacts were also assessed as not significant when considered in context with the characteristics of the proposed sites, including the absence of environmentally sensitive areas, the soft sediment seafloor (mobile sands), the good flushing rate and extensive area of similar habitat in the direct and wider area. Only a small area of habitat will be disturbed from the installation of anchors. The locations of the proposed leases are also not within the recognised migratory pathway for cetacean species along the NSW coastline.

The proposed sites are also not a high use area, safe navigation will not be obstructed, the site is not of significant commercial importance and the lease will be clearly delineated with navigation buoys.”

The Commercial Shellfish Aquaculture Leases will exclude ordinary Australians and visitors from accessing those nominated areas within Jervis Bay Marine Park, and result in areas being ‘secured’ by vested interests, and with NSW Government protection for up to 30 years. The leases will present an obstruction to navigation, which is why the leases must be marked by navigation lights, and will prevent access by many current waterway users.

Aspects concerning the wave climate, particularly for the lease location near Vincentia, have not been appropriately characterised in a technical sense. The impact of ‘scouring’ of the seabed due to the dynamic effects of wave and current action on the large number of anchors and mooring lines, has not been sufficiently analysed or represented.

Further analysis, including proper community consultation, is requested prior to any decision. Given the special nature of Jervis Bay, the **‘do-nothing’** option should be a strong candidate.

Yours sincerely,

John Lord

Annex: Comments concerning Fisheries NSW – Environmental Impact Statement

Comments concerning Fisheries NSW – Environmental Impact Statement

1. Need for aquaculture is assumed, and the ‘do-nothing’ option is dismissed

To the reader, the Environmental Impact Statement appears to be an exercise in ‘real-politik’. It proposes an exclusive arrangement between Government and Lease Holder /Operator, that requires the approval from the Minister for Planning and Infrastructure under s.115W of the Environmental and Planning Assessment Act 1979. The proposal seems to assume that such Ministerial approval will be forthcoming; presents no arguments in favour of protecting the existing environment; or arguments as to why such Ministerial approval should be denied. This is reflected in the statement on page 37: “The do nothing option was therefore considered to not be an appropriate alternative”. The EIS does not present any arguments in favour of preserving the current natural environment, open for everyone to access and enjoy. Therefore, the EIS does not necessarily reflect the interests of the broader community.

2. Argument is based on the claim that Jervis Bay Marine Park allows aquaculture

Whether the Jervis Bay Marine Park should allow aquaculture is a legitimate question, as is the question of whether aquaculture should deny the right of access of ordinary Australians to areas within the Jervis Bay Marine Park? As a taxpayer, and local rate-payer, I am opposed to the notion that the NSW State Government should negotiate a Lease Hold arrangement with a commercial Operator, that excludes the community from access to certain areas within the Jervis Bay Marine Park. Marine Parks should be open and accessible for all to share.

3. Argument is based on a historical instance of aquaculture, that fell into dis-use

Whilst historical usage may be a consideration, the current context is even more important. There are also historic examples of proposals for a steel industry and a nuclear power station! The old dilapidated rafts used in former times for shellfish aquaculture at Vincentia presented an obstruction and navigational hazard to local sailors and paddlers. Their removal around 2008 was a significant improvement in terms of water access for recreational sailors and paddlers. The EIS seeks to downplay the importance of the Vincentia location in terms of waterway users, but for those who paddle in relatively close proximity to the shore-line, the proposed location becomes an area of exclusion, also an obstruction and a potential hazard. The numbers of local waterway users and visitors that come to Vincentia to paddle kayaks or other small craft is increasing, due to the appeal of the natural environment in Jervis Bay. The following statement on page 39 is not correct: “The proposed sites are not high use areas, safe navigation will not be obstructed, the sites are not of significant commercial importance and the leases will be clearly delineated with navigation buoys”. There will be an obstruction.

4. There is no independence or impartiality evident in the preparation of the EIS

For NSW Department of Primary Industries to request NSW Fisheries to prepare an EIS, particularly when there is already a political agenda to support aquaculture, sets-up this situation where the EIS is biased in support of aquaculture, and excludes arguments in favour of preserving the current natural state of Jervis Bay, that is open for everyone to enjoy.

5. Proposal is ‘Exclusive’ of the broader community; and re-inforced by ‘Security’.

Page 136 states: “It will be an offence to interfere with or damage the longline infrastructure or stock under the FM Act. The combination of operational visits to the leases along with remote surveillance measures will be employed to ensure the security of the leases”. Does this statement imply that either the NSW State Government, or the Commercial Operators, will employ security measures to enforce the “Exclusive” nature of the commercial lease? Page 131, refers to: “During the first term (15 years with a right of first renewal for an additional 15 years of the leases)”. Evidently, the lease arrangement is potentially for up to 30 years, so the “Exclusive” and “Secure” nature of the proposal is quasi-permanent.

6. ‘Community consultation’ appears to have been ‘information distribution’

Community consultation appears to have been more of an information distribution process, rather than one of genuine ‘consultation’. This reflects the position adopted by Fisheries in the EIS regarding the blanket dismissal of the ‘do-nothing’ option – refer EIS page 37.

7. Consultation has already included potential Lease Operators and Investors

Page 34 states: “Fisheries NSW have also had representation from a number of potential investors interested in developing aquaculture facilities in Jervis Bay”. This statement, that reflects the commercial nature and underlying message of the EIS prepared by Fisheries, is contrary to the intent of an Environmental Impact Statement that should be independent, and unbiased by commercial considerations and vested interests.

8. Risks are consistently downgraded, with mitigation advocated in support

EIS Risk Assessments conducted by Fisheries NSW consistently down-play “Consequences”. This is apparent, either by understating effects, or alternatively, suggesting mitigation action, often on the part of the “yet-to-be-selected-Lease-Holder-Operator”, that will have the same effect of reducing the consequences. Examples include:

- 8.1.3 – Noise;
- 8.1.5 – Structural Integrity and Stability – Longline Infrastructure;
- 8.1.6 – Coastal Processes and Climate Change;
- 8.1.7 – Navigation and Interactions with other Waterway Users;
- 8.2.1.1 – Visual Amenities;
- 8.2.1.2 – Marine Vessel and Vehicular Transport;
- 8.2.1.4 – Noise;
- 8.2.2.1 – Water Quality and Sedimentation;
- 8.2.2.3 – Artificial Lights; and
- 8.2.2.9 – Waste Disposal.

Details of how and why these consequences are under-stated can be provided separately.

9. Consideration of the impact of anchors and mooring chains on the seabed, particularly the effects of 'scouring' due to system dynamics, is inadequate

Section 8.1.5 "Structural Integrity and Stability – Longline Infrastructure", does not describe, either the 'footprint' of the combination of anchors and mooring chains, or dynamic motions that could result from the combined effects of wind, waves, tides and currents. Scouring of the seabed could occur, and this is not necessarily reflected accurately in the risk assessment.

Page 124, Figure 42, supposedly provides a schematic diagram of the basic components of the longline infrastructure. However, this representation could be incomplete, or inaccurate. In order for the longline to remain taut, under changing tidal states and weather conditions, it is necessary for the mooring chain to be sufficiently heavy to take up the slack, by lying on the bottom like a 'snake'. The mooring chain increases the footprint of the anchor. There is no longline system design or configuration proposed at this stage, and therefore the number and type of anchors and mooring chains that are required is not known. Depending upon the nature of the active design load cases, comprising wind, waves, tides and currents, there is the possibility of scouring of the seabed around each combination of anchor and mooring chain. The EIS does not mention this as a risk, and does not assign a likelihood or a consequence. This lack of knowledge by Fisheries NSW is recognised on page 124, which states: "Further analysis of the region's wave climate will be undertaken by structural engineers and/or longline manufacturers to ensure structural integrity and stability of the infrastructure in all weather conditions."

In addition, page 127 states: "Waves and swells in Jervis Bay are predominately from a southward direction with a wave period of 6-14 seconds (McCowan et al., 1987 cited in Joyce et al., 2010). Mean wave height ranges from 1-2 m and the maximum recorded wave height is 7 m (Brown et al., 1985). As energy enters at the mouth it is distributed along the circumference of the whole bay so wave energy is generally small (Joyce et al., 2010)."

Whilst the above could be true for locations at Callala Beach, it does not reflect personal experience for the location at Vincentia. Vincentia is sheltered from the South, but exposed to the North-East. The 'worst case' is typically when a summer North-Easterly blows across the shallow and short fetch of Jervis Bay to produce a very short and steep-crested chop. This suggests that Fisheries NSW have not conducted their own field studies, nor do they have substantial expertise in the design of longline systems.

Page 104 states: "There will be two primary anchors at each end of the longlines and each anchor is likely to occupy about 1.5 m². Depending on the species grown and the particular longline infrastructure required, 2-5 stabilising anchors will be required per longline which will each occupy an area of up to 1 m². Each lease will have about 15 rows of longlines and each longline will not exceed 600 m on the Callala Leases and no more than 300 m on the Vincentia Lease. The Callala Leases are likely to require 3-5 stabilising anchors per longline while the Vincentia Lease will most likely only need two secondary anchors. Based on these criteria the total area of seabed impacted by the installation of the anchors is about 120 m² on each of the Callala Leases and 75 m² on the Vincentia Lease (i.e. a maximum of 315 m² for the three leases)." Re-checking the above figures:

Callala 1: 15 rows x (2 anchors+5 stabilising anchors) = 30 anchors; 75 stabilising anchors;
Callala 2: 15 rows x (2 anchors+5 stabilising anchors) = 30 anchors; 75 stabilising anchors;
Vincentia: 15 rows x (2 anchors+2 stabilising anchors) = 30 anchors; 30 stabilising anchors;
Total: = 90 main anchors; 180 stabilising anchors; plus unknown quantity of mooring chain;
Area of affected seabed = unknown?

10. Operational risks are discounted as being the responsibility of the Lease Holder

For a number of risk assessments, such as 8.1.3 “Noise”, 8.2.1.4 “Noise” (P. 162), the consequences are assessed as 1 “Minor”, and mitigated by the expected cooperation of the Operator. Part of the justification of the ranking is the presence of, for example, similar existing vessels. Fisheries NSW unfortunately fails to differentiate between existing vessels used for recreational purposes, or commercial whale watching, with new ‘Industrial-scale’ operations in close proximity to residential housing, and/or waterway users who prefer peace and quiet. The Industrial-scale activities, and the consequent noise, is anticipated by Fisheries NSW (p.163) to occur from Monday to Friday (7 am to 6 pm), and Saturday (8 am to 4 pm), and avoiding Sundays and Public Holidays where possible. The argument that more (noise) of the same (noise) as already exists is not accepted as being a reasonably valid justification of the ranking. The conclusion that: “The risk of the noise associated with the operation of the Commercial Shellfish Aquaculture Leases having a significant impact on surrounding communities was assessed to be ‘low’, is just wishful thinking on the part of Fisheries NSW. The value and precision of attenuated noise estimates of 23.7 dB for Orion Beach defy belief. (Refer - Table 24: Estimates of the attenuation of noise associated with the operation of the Commercial Shellfish Aquaculture Leases at a range of locations in Jervis Bay (Source Fisheries NSW, 2013).