

IN THE MATTER

of the Resource
Management Act 1991

AND

IN THE MATTER

of an application by Port
Otago for resource
consents to implement
Project Next Generation.

STATEMENT OF EVIDENCE OF NIGEL BRYCE

1.0 INTRODUCTION

1.1 My name is Nigel Bryce. I am an Associate Director of Ryder Consulting Limited ('**Ryder**'), an environmental consultancy that provides environmental, planning and process management services.

1.2 I am a qualified and experienced environmental planner, having completed a Bachelor of Resource and Environmental Planning at Massey University in 1996.

1.3 I have 14 years experience as a resource management practitioner in New Zealand and in the United Kingdom, which includes both public and private sector planning roles.

New Zealand Experience

1.4 Prior to 2001, I worked in the public sector with the North Shore City Council and the Gisborne District Council. In Gisborne I worked on a number of coastal related projects, including Gisborne Port expansion proposals, was part of a project team who investigated a Port feasibility study in Tolaga Bay, a range of coastal subdivision and development applications and was involved coastal dune care initiatives to address coastal erosion issues. I worked with Civic Corporation Ltd in Queenstown as a Senior Planner for a period of three years until March 2004 and was involved with a broad range of resource consent applications and presented expert planning evidence on over a dozen appeal cases on behalf of the Queenstown Lakes District Council. Between March 2004 and September 2006, I moved into private practice with Mitchell Partnerships, in Dunedin and was employed as Principal Resource Management.

International Experience

1.5 In late 2006, I moved to the United Kingdom and worked as a Principal Planner and Central and South Area Team Manager to the London Borough of Hillingdon and was involved with the processing of a variety of large scale major applications. In my role as the Area Team Manager, with Hillingdon I was responsible for managing a multidisciplinary team of planners, urban design and highways engineer professionals and was extensively involved with the ongoing development requirements at Heathrow Airport and large scale commercial development on the periphery of the airport. I was also responsible for all ongoing consultation with British Airways Authority, the owners of Heathrow Airport. I returned to New Zealand in August 2010 and started in my current role with Ryder's in September 2010, based out of their Dunedin office.

1.6 I have been engaged by the following submitters:

- Port Chalmers Fisherman's Cooperative Society Limited (submitter 2) ('**the Cooperative**');
- the Paua and Kina Industry Council's (submitter 198);
- Pauamac 5 (submitter 171);
- the New Zealand Federation of Commercial Fishermen Inc (submitter 194) ('**the Federation**'); and
- the Otago Rock Lobster Industry Association (submitter 126) ('**the Lobster Association**');

1.7 I herein refer to these submitters as the 'Collective', who represent commercial stakeholders who have an interest in each of the main fish resources within Otago's coastal waters, including finfish and flatfish species, rock lobster ('cray') and paua and kina. All submitters within the Collective are opposed to this application. I would note at this juncture, that the Otago Rock Lobster Industry Association supported the application subject to conditions. These requested conditions¹ have not been carried through in the Officer's report. For this reason, the Lobster Association remains concerned with the impacts of this Proposal.

1.8 The submissions made by the Collective raise a number of issues that contain shared themes; all specifically relating to the disposal of dredge material, within Blueskin Bay. As you have heard from the Ports witnesses, Blueskin Bay is a local and regionally important fishery². In relation to the effects of the Proposal on local fisheries, these can be broken down into two categories:

- Local trawlermen will be adversely affected by the disposal of both sands and clays over their existing trawling grounds (which will be partly occupied by disposal site AO). To this end, the Cooperative and Federation are opposed to all phases of the Proposal;³
- For the local paua, kina and lobster fisheries, concern is raised about the disposal of fine silts and clays at disposal site AO, given that these fisheries are particularly susceptible to the effects of suspended sediments⁴. To this end their concerns while relating to all phases, are principally related to the disposal of 7.2 million m³ of fine silts and clays associated with the Major Capital Works as this will introduce the greatest level of fine sediments into Blueskin Bay.

1.9 This brief of evidence considers the proposed Capital and Incremental Maintenance Dredging Project identified as project 'Next Generation' ('the Proposal') and those consent applications that comprise this project. While having regard to the applications as a whole, the issues raised by the Collective center on those actual and potential adverse effects generated by the disposal of dredge material at proposed disposal site AO.

1.10 For the benefit of the Panel, I have summarised the main concerns of these parties in Appendix 1 to this evidence. I have also provided a brief summary of some of the submitters, which I have included in Appendix 2 of this evidence.

¹ a) Application be conditioned to ensure that dumping of fine silts at site AO doesn't occur during weather conditions which will drive spoil plume into inshore areas, particularly macrocystis beds along the Karitane coast and North; b) No fine silts to be deposited in the existing consented dump sites; c) consideration of alternative disposal site for silts and clays at the head of the harbour be investigated.

² The evidence of Mr Rick Boyd at paragraph 84 of his evidence states:

"...on a regional level, the fishery in Blueskin Bay is very important to the survival of the smaller vessels that fish out of local ports, especially the small trawlers".

³ Refer paragraph 5.1 of Mr Little's evidence.

⁴ Paragraph 21 of Kina and Paua Industry Council submissions, the process of recruitment plays a critical role in the structure and dynamics of populations and communities of benthic marine organisms such as kina and paua and increased sediments can adversely affect this recruitment process.

- 1.11 Before I address the relevant Statutory Considerations and documents raised by the Proposal, Mr Steve Little on behalf of the Cooperative; Mr Simon Gilmour on behalf of Otago Lobster Association; and Mr Peter Hayden on behalf of the Harbour Restoration Group will each present statements that address points raised within their submissions. Please note that Mr Hayden will be speaking on behalf of Mr Gilmour in discussing the Lobster Associations request that an alternative site within the harbour be investigated for the disposal of clays and fine sediments in particular. Once these gentlemen have presented their evidence and the Panel have asked any question of these witnesses, I will revert back to Section 2.0 of my evidence.

2.0 SCOPE AND STRUCTURE OF EVIDENCE

- 2.1 This evidence has been prepared in relation to Statutory Planning matters relating to the Proposal. This includes:

- a. Rules and activities status of the Proposal;
- b. Concerns raised by the Collective Group (summarised in Appendix 1);
- c. A statutory plan analysis of the Proposal in terms of the New Zealand Coastal Policy Statement (NZCPS), the Otago Regional Policy Statement (RPS), and the Otago Regional Coastal Plan (RCP);
- d. Other matters to consider under the Resource Management Act (RMA) including consideration of alternatives;
- e. Part II of the RMA; and
- f. Conclusion.

- 2.2 In preparing my evidence, I have:

- a. Read the resource consent applications and the accompanying Assessment of Effects on the Environment ('**AEE**');
- b. Reviewed the main technical documents supporting the application;
- c. Reviewed the Otago Regional Council's section 42a officers report ('**Officer's Report**') and associated conditions;
- d. Reviewed the applicant's evidence presented to this Hearings Panel (provided to me by the Applicant), including the draft Environmental Management Plan tabled at the opening of this hearing and subsequent amendments put forward within the evidence of Dr Mitchell.
- e. Reviewed the relevant provisions of the relevant planning instruments.

- 2.3 I confirm that I am familiar with the areas that are proposed to accommodate the proposed dredging and disposal activities.

- 2.4 I confirm that I have read the 'Code of Conduct for Expert Witnesses' contained in the Environment Court Consolidated Practice Note 2006 and I agree to comply with it. I have complied with it in the preparation of this statement of evidence.

3.0 THE PROPOSAL

- 3.1 The application, the existing Port operations and location descriptions are appropriately described in detail also contained in the Officer's report and in the evidence of witnesses for the Port.

- 3.2** These provide a satisfactory level of description of the proposal and the existing environment, however I propose to discuss the existing operations of the Collective Group and where these are sited in relation to the Ports proposal.

Local Trawler Fishery

- 3.3** As you have heard within the evidence presented to you earlier by Mr Little and Mr Boyd (on behalf of the Port), Otago Harbour, Blueskin Bay and wider coastal waters of Otago have been fished for many years and there is a diverse fish fauna, which comprise predominantly common and abundant species that are present in similar habitats throughout much of the central and southern regions of New Zealand and which are sustainably managed. The Otago Harbour, is sheltered and the manner in which the Otago Peninsula shelters Blueskin Bay in the winter months, makes this an important area for the local fishing industry, especially smaller trawler boats who would find it difficult to operate in the more exposed ocean beyond the bay. As you have heard, flatfish are one of the main inshore commercial fish targeted by trawlers in coastal Otago.

Paua Fishery

- 3.4** The commercial paua fishery in the southern part of the South Island is divided into three Quota Management Areas (QMA) of which about 31% of New Zealand's paua catch is taken in total. The QMA that may be affected by the Port application is Pau5D, which is bounded in the north by the Waitaki River mouth and in the south by the Waiau. Pau5D comprises approximately 8.5% of the national catch and has a total allowable catch of 89 tonnes and there are 51 individuals or companies who own quota in Pau5D. While the Pau5D QMA covers a large coastline, around 518km, much of it is unavailable to commercial paua fishing⁵. Therefore, those remaining areas are extremely important to the overall health of the fishery.

Kina Fishery

- 3.5** There is currently no commercial fishing for kina in the affected areas due to historic closures by regulation⁶. It is however the intention of Kina Industry Council to explore the removal of regulations to allow for future sustainable development of commercial kina fishing. Kina interests therefore wish to ensure that the application does not adversely affect the future potential of commercial kina fishing in the area.
- 3.6** In relation to the other fishery interests comprising the Collective, Mr Gilmour has provided a brief overview of the Lobster Association and its Otago operations. I provide a brief overview of the Federation, and its opposition to this proposal within this report and in Appendix 1 and 2 to this evidence.

⁵ Some 223km are closed by regulation and a further 20.5km through industry observed voluntary closures. A significant part of the coastline remaining is sandy beaches lacking in the rocky reef systems which make up paua habitat.

⁶ Note that Boyd states at paragraph 134 of his evidence that Kina harvests from the whole of FSA24 (Figure 10) are modest, averaging about 1800 kg annually for the past 20 years.

4.0 RULES AND ACTIVITY STATUS

- 4.1 I agree with both the Applicant's and Reporting officer's assessment of the consents required. In this regard, the Proposal requires consent as a Discretionary and Restricted Coastal Activity as set out at 9.2 of the AEE and Section 4 of the Officer's report. I note that as the applications are entwined, they should be bundled, such that they are assessed on the most restrictive activity classification. Consequently, I have assessed the applications lodged by the Port as a **discretionary activity**.

5.0 STATUTORY ANALYSIS

- 5.1 Subject to Part 2 of the RMA, Section 104 of the Act sets out the matters to be considered when assessing an application for a resource consent. These are set out at section 9.3 of the AEE and 8.2 of the Officer's report. Section 104 (1) of the Act states:

(1) When considering an application for a resource consent and any submissions received, the consent authority must, subject to Part 2, have regard to—

(a) any actual and potential effects on the environment of allowing the activity; and

(b) any relevant provisions of—

- *(i) a national environmental standard:*
- *(ii) other regulations:*
- *(iii) a national policy statement:*
- *(iv) a New Zealand coastal policy statement:*
- *(v) a regional policy statement or proposed regional policy statement:*
- *(vi) a plan or proposed plan; and*

(c) any other matter the consent authority considers relevant and reasonably necessary to determine the application.

- 5.2 I set out my consideration of each of these provisions in my evidence below. I have not sought to repeat all of the actual and potential effects raised by this Proposal. I do, however, discuss those matters specifically related to the disposal of dredge material at disposal area AO. I do so, as they have not been, in my opinion, adequately acknowledged by the Applicant, or addressed in the evidence that has been put before you on the same. In undertaking my assessment set out below, I have had regard to the evidence of Dr Stewart, whose evidence was presented to the Panel on Friday last week in support of the submission by Southern Clams Limited and which also discusses the effects of this Proposal on Blueskin Bay on behalf of the Collective.

- 5.3 I also acknowledge the significant beneficial economic effects that the Proposal will bring and that it will enable community and business activities associated with the growth of the Port. These are significant considerations that weigh in favour of consent being granted. They are not, however, sufficient in-of-themselves, in my opinion, for consent to be granted. In this regard, the adverse effects associated with the Proposal must, in my opinion, be appropriately avoided, remedied or mitigated. My evidence is focused on first discussing those effects that have not, in my opinion, been adequately

addressed by the Applicant, and then discussing the measures needed to ensure that the effects are remedied or mitigated.

6.0 EFFECTS CONSIDERATIONS

Existing Environment

- 6.1 I note that in respect of the existing environment, section 104(2) states that “[w]hen forming an opinion for the purposes of subsection (1)(a), a consent authority may disregard an adverse effect of the activity on the environment if a national environmental standard or the plan permits an activity with that effect”.⁷ This is traversed in detail in the Applicant’s opening submissions⁸, where it is stated that the effects from this level of permitted activity can be properly be disregarded. I agree that the permitted maintenance dredging forms part of the permitted baseline.
- 6.2 I also note the evidence of Dr Mitchell, concludes that “the effects that are permitted are directly relevant”⁹. I agree with this conclusion especially as it relates to the Incremental Capital Works (‘ICW’).
- 6.3 Section 3 of the Act defines “effect” as:
Meaning of effect
- *In this Act, unless the context otherwise requires, the term **effect** includes—*
 - *(a) any positive or adverse effect; and*
 - *(b) any temporary or permanent effect; and*
 - *(c) any past, present, or future effect; and*
 - *(d) any cumulative effect which arises over time or in combination with other effects—*
 - *regardless of the scale, intensity, duration, or frequency of the effect, and also includes—*
 - *(e) any potential effect of high probability; and*
 - *(f) any potential effect of low probability which has a high potential impact.*
- 6.4 Blueskin Bay already contains two dredging disposal sites (the third Shelley Bay is located inside the Mole at Aromoana), with a fourth introduced by this Proposal. I have read a number of background monitoring reports¹⁰ prepared in accordance with the conditions of consent 2000.471 and while I note that the dumping of dredging material does not appear to have caused a significant adverse effect on the local marine environment surrounding these existing dump sites, the Proposal does nonetheless seek to introduce further sediment disposal within Blueskin Bay and its associated effects. This is particularly important in, my view, when regard is to be had under section 104(1)(a) to the actual and potential effects of the proposal.

⁷ My emphasis added.

⁸ Refer paragraphs 67-70.

⁹ Refer paragraph 3.9 of Dr Mitchell’s evidence.

¹⁰ Paavo and Probert (2005) prepared in fulfillment of condition 7 (requiring assessment o effects on species diversity, effects on abundance and ongoing biological monitoring) which included research and experiments at the maintenance dredge sites.

- 6.5 While cumulative effects is not defined within the Act, there has been a broad range of case law¹¹ on this subject and it is my understanding that cumulative effects are effects arising over time and effects arising in combination with other effects. In discussing cumulative loss of fishing grounds¹², Dr Stewart concludes that approximately 10-15% of the shallow near-shore fishing grounds in Blueskin Bay will have been cumulatively lost as a result of dredge spoil deposition¹³. While you have heard that the habitats that underlie disposal area AO are not significant for their conservation values, they nonetheless comprise common species that form part of a larger marine habitat that is important to the Blueskin Bay fishery.
- 6.6 This is, in my opinion, a relevant consideration and there has been very little assessment of the potential cumulative effects of this Proposal. Given the potential loss and degradation to the local trawler fishery conducted in Blueskin Bay, I am of the opinion, that the effect has the potential to be significantly adverse. I am not able to draw a more definitive conclusion at this juncture. As I note in paragraph 6.17 of this statement, a more detailed assessment than that which has been undertaken to date is needed for a firm conclusion to be drawn.

Commercial Fishing Effects

- 6.7 As I will set out below, the Proposal will have two specific actual and potential adverse effects on commercial fishing interests in the Blueskin Bay fishery. The first relates to the loss and degradation of part of the existing trawl grounds that is used by local operators. The second relates to the potential for the disposal of fine grained sediments and clays at disposal site AO to adversely effect existing paua, kina and lobster fisheries within Blueskin Bay and wider coastlines to the north. I discuss each in turn below.

Local Trawler Fishery

- 6.8 Both the Cooperative and the Federation oppose this application on the basis of its impacts upon the local trawler fishery, given that the disposal area is sited in a local¹⁴ and regionally important trawler fishery¹⁵. Blueskin Bay is especially important for smaller trawlers who are unable to venture into deeper waters¹⁶.
- 6.9 In addressing the impacts on the local commercial fishery, the Applicant has presented evidence, which I understand to conclude that there will be short to medium term loss of benthic species on which demersal species feed at disposal Site A0 and in an area to the north of A0. However, as there will be no permanent loss of trawl grounds at AO, any effects on the local trawlers will be more of a short term inconvenience, and will be minor¹⁷ (emphasis added).

¹¹ The leading case on cumulative effects is the Court of Appeal decision in *Dye v Auckland Regional Council* (2002) 1 NZLR337

¹² Refer paragraph 5.6 of Dr Stewart's evidence.

¹³ Refer paragraph 5.6 of Mr Stewart's evidence.

¹⁴ Refer paragraph 139 of Mr Boyd's evidence.

¹⁵ Refer paragraph 4.9 of Mr Little's evidence.

¹⁶ Refer paragraph 4.9 of Mr Little's evidence which confirms three smaller operators trawl within 10 nautical miles of the heads.

¹⁷ Refer paragraph 129-130 of Mr Boyd's evidence.

- 6.10** In reaching this conclusion, the Applicant considers that the effects will be minor based on the wide coastal distribution of fish stocks and the correspondingly widely distributed fisheries for these species along the east coast of the South Island¹⁸. I understand that the recovery time, of these habitats would be expected to be several years for the longer lived groups of benthic communities present.¹⁹ Reinforcing this point, the Applicant has identified a three year recovery time for a dredging operation in the Hauraki Gulf²⁰. It is my understanding that the Applicant considers all of the relevant issues associated with potential effects on fisheries can be addressed by the draft consent conditions and the proposed EMP²¹.
- 6.11** The evidence of Mr Little has identified that the trawl grounds over which disposal area AO is to be located are relied upon by at least three small trawler operators, and are relied upon seasonally during the winter months by larger commercial trawlers²². This trawl area for the smaller operators is identified within Appendix 1 of Mr Little's evidence. I note that this plan also refers to other fisheries such as the coastal areas where paua are commercially fished.
- 6.12** In relation to the smaller trawlers that operate locally, many of these vessels are paid a premium for fresh fish and supply the local Dunedin market and their economics are based on access to local fishing grounds²³. These vessels are mostly too small to venture further afield²⁴.
- 6.13** In discussing the current economic conditions within which the fishing industry operates, both Mr Little²⁵ and Mr Boyd²⁶ have confirmed that small commercial fishing vessels are finding it increasingly difficult to survive economically as costs rise. The evidence of Mr Little has confirmed that if target species that have been historically caught in Blueskin Bay are displaced due to the impacts on their feeding areas, then the Proposal will likely impact upon the livelihoods of local trawler men who operate in this area²⁷.
- 6.14** As set out by Mr Little, trawlers will target species for which they hold a quota for, or where they contract to larger fishing companies who hold the quota for specific target species²⁸. Mr Little has highlighted that where local fishing grounds may be disturbed, it is not simply a case of trawling to another location given the need to target fish species held within a quota and their individual operational constraints²⁹. If the species targeted by local trawlers are displaced, it is more difficult for individual boats to meet their quota for specific fish species. In the case where trawlers are contracted to larger companies, if the smaller trawlers are unable to meet their contract there is the

¹⁸ Refer paragraph 20 of Mr Boyd's evidence.

¹⁹ Refer paragraph 142 of Mr James's evidence.

²⁰ Refer paragraph 132 of Mr James's evidence, where the Port of Auckland disposed of 262,000 m³ of dredge material and the benthic communities returned to levels similar to control sites away from the disposal site within three years

²¹ Refer paragraph 20 of Mr Boyd's evidence.

²² Refer paragraphs 4.1, 4.9 and 4.11 of Mr Little's evidence.

²³ Refer paragraph 4.10 of Mr Little's evidence

²⁴ Refer paragraph 84 of Mr Boyd's evidence.

²⁵ Refer paragraph 3.9 of Mr Little's evidence.

²⁶ Refer paragraph 138 of Mr Boyd's evidence.

²⁷ Refer paragraph 4.1 of Mr Little's evidence

²⁸ Refer paragraph 3.4 of Mr Little's evidence.

²⁹ Refer paragraphs 3.6-3.7 of Mr Little's evidence.

potential that the quota holder could reallocate this contract to another operator, therefore potentially driving the smaller operators out of business. This in my opinion, would have the potential to militate against the achievement of the Act's purpose. I return to this at paragraph 8.0 of this evidence.

- 6.15** While the Applicant has considered the economic benefits to the Port and wider economy through implementing this Proposal, there is no analysis of the likely increased costs to individual fishers who may be displaced until such time as the disposal area recovers.³⁰ Mr Little raises concern that the Applicant has failed to identify the quantities of fish caught within and around disposal site AO so as to reflect the value of the local fishery and that no consideration is given to the income generated to the local operators from these catches and how they may stand to lose financially if their fishery is affected in any way by this dump site. Mr Little considers this to be a serious omission.³¹ The Applicant has presented information on key target species caught within the Fisheries statistical area 24 (FSA24), which includes Blueskin Bay fishery and highlights that the Blueskin Bay fishery is a relatively small part of FSA24³². However, at a local and regional level the Blueskin Bay fishery is very important to the survival of the smaller vessels that fish out of local ports.³³
- 6.16** In reviewing the evidence before me, it is clear that local operators are already subject to operational constraints³⁴ and that benthic communities underlying the disposal area would not survive smothering during Major Capital Works³⁵ and that their recovery may take up to three years³⁶. Balanced against this is the potential cumulative loss of approximately 10 to 15% of the shallow near-shore fishing grounds in Blueskin Bay³⁷. Having considered these points, in my opinion, there will be a "high probability" of effects on the trawling fishers that operate within Blueskin Bay.
- 6.17** In my opinion, and again given the evidence of Dr Stewart and Mr Little, I do not consider that conclusions can be reached that the effects of this Proposal are "no more than minor", especially given the lack of detailed analysis that assesses the potential adverse effects on this part of the Blueskin Bay fishery. In this regard, I do not believe that it is possible to properly assess the effects of the Proposal on the trawler fishing industry without a detailed cost benefit analysis that considers the nature of these effects.

Paua, Kina and Lobster Fisheries

- 6.18** Another important consideration is the wider impacts upon other fishery interests, such as the Lobster, paua and kina industries³⁸. Because these industries are governed by the Quota Management System ('QMS'), any

³⁰ Mr Butcher at paragraph 36 of his evidence states "[b]ecause of both the low probability of the outcomes and the uncertainty of the current economic impact of activities which might be affected, I have not tried to quantify the economic impacts of any such negative effects".

³¹ Refer paragraph 4.2 of Mr Little's evidence.

³² Refer paragraph 82 of Mr Boyd's evidence.

³³ Refer paragraph 84 of Mr Boyd's evidence.

³⁴ Refer paragraph 4.9 of Mr Little's evidence.

³⁵ Refer paragraph 133 of Mr James's evidence.

³⁶ Refer paragraph 133 of Mr James's evidence.

³⁷ Refer paragraph 5.6 of Mr Stewart's evidence.

³⁸ Noting that there is currently no Kina operations within the immediate vicinity.

significant localized effects upon these fisheries would have to be displaced to the other areas within the Quota Management Area ('QMA'). As reinforced within the submissions of Paumac 5 Inc.³⁹ and the Paua and Kina Industry Council's⁴⁰, displacement of fishing activity due to localised reduction in biomass (impacts upon kelp on which paua and kina feed), particularly for sessile species such as kina and paua can lead to increased fishing pressure on the remaining accessible stocks. This in turn can lead to increased risk of localised depletion and risks to the sustainability of fish stocks. It is for this reason why these fishery stakeholders and industry representatives are particularly concerned about relying on the EMP as proposed, given that it does currently contain thresholds that would otherwise govern how the future disposal operations could be appropriately managed to avoid, remedy or mitigate the potential adverse effects on these valuable fisheries.

- 6.19** In my opinion, there has been no evidence presented to this Panel that appropriately avoids, remedies or mitigates those actual effects on the existing Trawler fishing industry, that will be created by this Proposal.

Ecological Effects

- 6.20** Parties such as the Lobster Association, Paua and Kina Industry Council's are concerned that lobster, paua and kina will be adversely affected by increased suspended sediments in Blueskin Bay. This is because both paua and kina are sessile and the process of recruitment plays a critical role in the structure and dynamics of populations and communities of benthic marine organisms such as kina and paua. In relation to lobster, Mr Street's statement⁴¹ appended to Mr Gilmour's evidence, states that to ensure better survival, puerulus larvae that settle require cover in fine crevices or marine growth, as do subsequent small rock lobsters. Any significant reduction in this habitat would adversely affect the numbers of juveniles and hence later recruitment into the fishery.
- 6.21** As indicated in the evidence of Dr Stewart⁴², Blueskin Bay is a very turbid environment, especially during winter months, due principally to local runoff and wave action resuspending sediments. Any additional sediment in this system could have wide-ranging consequences for productivity in the bay and on the quality of habitats supporting fisheries, with kelp forests being particularly susceptible to sedimentation⁴³, which as identified above, form an important habitat for juvenile lobster, kina and paua.
- 6.22** While the Applicant has undertaken detailed modelling and hind casting to predict the path of the sediment plume, there has been little or no detailed analysis of baseline conditions along the Blueskin Bay coastline. Dr Stewart concludes that the limited data collected on ambient suspended sediment

³⁹ Any significant loss of population in an area, especially loss of juvenile animals, means catch effort must be redirected to other areas which will obviously increase fishing pressure on the remaining population and can lead to serial depletion of the fishstock; progressive collapse of paua sub populations. The only way to avoid long term damage to the fishery is then to reduce the catch taken.

⁴⁰ Refer clause 30 of the Paua and Kina Industry Council submission.

⁴¹ Refer paragraph 3.2 of Mr Street's statement.

⁴² Refer paragraph 5.11 of Dr Stewart's evidence.

⁴³ Refer paragraph 5.13 of Dr Stewart's evidence.

concentrations in Blueskin Bay in the areas that are likely to be affected by sediment plumes is a significant shortcoming of the application⁴⁴.

- 6.23** The Act under Section 7(d) requires regard to be had to the intrinsic values of ecosystems⁴⁵. In my opinion, having regard to the resilience of an ecosystem and its ability to withstand effects from increased sediments within the marine environment, goes to the heart of section 7(d) considerations. Furthermore, having considered the issues raised about the sensitivities of species such as kelp to reduced light, and the susceptibility of juvenile species such as paua and kina, in my opinion, having a detailed understanding of the threshold limits of these ecosystems will be central in determining whether the effects from sediment disposal can be appropriately avoided, remedied or mitigated by the EMP and underlying adaptive management process.
- 6.24** The Officer's report at paragraph 404 concludes "*[a]ny turbidity effects from the plume would be limited to the duration of dredging and disposal and a short time after, and its concentration of suspended sediments would be well below levels likely to impact directly on fish or shellfish eggs, larvae or adults*". However, in my opinion without baseline assessment in place now, it is difficult to confidently draw such a conclusion.
- 6.25** In my opinion, the reliance on modelling predictions alone, especially within such a dynamic marine environment ultimately leaves the adaptive management process as a "catch all" response to this Proposal.
- 6.26** I note that Dr Stewart concludes that he would expect some research to be done on ambient suspended sediment concentrations before operations commence and a monitoring programme be put in place to ascertain suspended levels at a minimum of two points in Blueskin Bay during spoil disposal⁴⁶.
- 6.27** In my opinion, an essential prerequisite for any adaptive management to work effectively is that there is a clear understanding of the state of the existing environment, especially in terms of the state of the environment that may be directly affected. Dr Stewart, highlights that in his opinion, this information should be identified before consent is granted for the Major Capital Works and provide for a 12 month baseline monitoring programme to appropriately reflect the seasonal dynamics influencing this coastal environment⁴⁷. For my part, I have some difficulty drawing conclusions that the adverse effects of the disposal operations can be appropriately mitigated without a true understanding of baseline conditions and it is for this reason that I consider this aspect of the application should be deferred pending further analysis.

⁴⁴ Refer paragraph 5.17 of Dr Stewart's evidence.

⁴⁵ Section 3 of the Act defines **intrinsic values**, in relation to ecosystems, means those aspects of ecosystems and their constituent parts which have value in their own right, including—

(a) their biological and genetic diversity; and

(b) the essential characteristics that determine an ecosystem's integrity, form, functioning, and resilience

⁴⁶ Refer paragraph 5.14 of Dr Stewart's evidence.

⁴⁷ Refer paragraph 6.1 of Dr Stewart's evidence.

7.0 SECTION 104(1)(B)(I) ANY RELEVANT PROVISIONS OF A NATIONAL ENVIRONMENTAL STANDARD

7.1 The AEE sets out that there is no national environmental standards directly relevant to the project. I agree with this assessment.

**7.2 SECTION 104(1)(B)(IV) A NEW ZEALAND COASTAL POLICY STATEMENT
The National Coastal Policy Statement**

7.3 The project is located within the CMA therefore the New Zealand Coastal Policy Statement ('NZCPS') is relevant. Further, the Otago Regional Policy Statement ('RPS') is relevant. With respect to clause 1(b)(vi) the Regional Coastal Plan is also relevant, and its objectives and policies are discussed below.

7.4 The NZCPS was gazetted on 4th November 2010. I note that a number of relevant policies have been addressed in the Officer's report⁴⁸, however there is no consideration of objectives. The evidence of Dr Mitchell sets out these objectives and supporting policies⁴⁹. I agree that he has set out all of the provisions relevant to the consideration of this Proposal. Rather than reiterating the points of agreement, I now discuss the provisions where my view diverges from Dr Mitchell and the Reporting officer.

7.5 The purpose of the NZCPS is to state policies to achieve the purpose of the Act, which is to promote the sustainable management of natural and physical resources in relation to the coastal environment of New Zealand. The NZCPS underpins the issues identified with seven objectives and 29 policies.

7.6 In raising reference to Objective 6, Dr Mitchell uses the example of Ports when discussing the functional need of some activities to locate in the coastal environment and the benefit they derive⁵⁰. I agree that this example is appropriate especially given the significant capital outlay invested in Port infrastructure. Similarly, the commercial fishing industry has a functional need to be located in the CMA and as I have set out above, components of this industry (smaller local trawler boats) have operational constraints that mean that they can only operate within certain limits of the CMA, such as Blueskin Bay.

7.7 Objective 6 seeks to enable people and communities to provide for their social, economic, and cultural wellbeing and their health and safety, through subdivision, use, and development, recognising that:

- some uses and developments which depend upon the use of natural and physical resources in the coastal environment are important to the social, economic and cultural wellbeing of people and communities;
- functionally some uses and developments can only be located on the coast or in the coastal marine area;
- the protection of habitats of living marine resources contributes to the social, economic and cultural wellbeing of people and communities;

7.8 Objective 6 is supported by Policy 6, which also reinforces the functional need

⁴⁸ Officer's assessment of NZCPS policies contained in paragraphs 446-463.

⁴⁹ Refer paragraph 3.15-3.37 of Dr Mitchell's evidence.

⁵⁰ Refer paragraph 3.17 of Dr Mitchell's evidence.

of certain uses and development to locate within the CMA (Policy 6(c)). In relation to the fishing industries functional need to locate within the CMA and reliance on marine resources to provide for the livelihood of people and communities who use these resources, I note that neither the Reporting officer nor Dr Mitchell specifically draw this distinction with Objective 6 and Policy 6. I consider this to be a notable oversight, as it is a matter that, in my opinion, needs to be weighed carefully when evaluating the overall appropriateness, or acceptability, of the Proposal.

- 7.9** Policy 9 provides for the recognition that a sustainable national transport system requires an efficient national network of safe ports, servicing national and internal shipping. Having considered the evidence of Mr Butcher (on behalf of the Port), and the details presented within the application it is clear that the Port is a significant resource and that it would be an efficient use of this resource to enable its upgrade to cater for its future growth. The Proposal would in my opinion accord with the direction of Policy 9.
- 7.10** Policy 3 seeks to adopt a precautionary approach towards proposed activities whose effects on the coastal environment are uncertain, unknown, or little understood, but potentially significantly adverse. I agree with the Reporting officer that the adaptive management approach employed within the application and reflected within the draft conditions is appropriate in order to give effect to this policy. The Port has undertaken monitoring of the existing three dump sites, and as such there is some knowledge and understanding about the nature of effects directly related to the discharge of silt at these locations. However, in my opinion there are still uncertainties about the impact of the discharge of finer silts and clays, which require a precautionary approach to be adopted in this instance. In my opinion, the application can accord with the intent of the policy, provided that a robust environmental baseline is established and clear 'thresholds for action' are set out within an appropriately cautious adaptive management programme. As I have noted, the evidence before me points towards the existing environmental baseline being inadequately understood. The absence of clear (explicit) thresholds that if achieved, necessitate action, is also a weakness of the adaptive management mechanism that has been put to the Committee. For a precautionary response to be adopted in this instance, it is essential, in my opinion, for the thresholds to be embedded within any conditions that are imposed on the resource consents being sought by the Port of Otago.
- 7.11** Policy 11 provides direction for managing effects of activities on indigenous biological diversity and directs at Policy 11(a) that adverse effects on species and habitats which meet specified conservation criteria be avoided, and (b) that for other biological values significant adverse effects be avoided, remedied or mitigated. Disposal site AO has been selected because it does not contain benthic communities of high conservation value⁵¹ and the effects, while resulting in the complete loss of these communities, these areas will recover over time. I note that the Applicant has identified that many of the species found in this area are common species found throughout New Zealand waters. Mr James has confirmed that most benthic animals

⁵¹ James at paragraph 57 of his evidence states that no rare or unique species were recorded in recent surveys at the level of taxonomic detail used and commonly applied.

underlying disposal site AO will not survive smothering⁵². Furthermore, Policy 11(b) requires any other adverse effects to be remedied, avoided or mitigated on habitats of indigenous species that are important for commercial purposes⁵³. In my opinion, the Proposal does not avoid, remedy or mitigate adverse effects on this part of Blueskin Bay and its marine habitat, which as you have heard is important to the local fishing industry. It is evident that target fish species may not be directly affected⁵⁴, however their habitats will be. As such, in my opinion, the Proposal raises clear tension with this policy outcome, given that there is no mitigation proposed to offset these adverse effects on benthic communities and the local and regional importance of this area to commercial trawler boats that operate within Blueskin Bay. In relation to other matters raised under Policy 11(b), I am not aware of any information that has been presented by the Applicant that highlights the importance of the southland current for spawning crayfish or whether appropriate regard has been given to the impacts of this disposal site on migration paths of this lobster species. This is a matter raised within the evidence of Mr Gilmour (refer appended evidence of Mr Street).

7.12 Policies 21 to 23 address the enhancement of water quality, sedimentation and the discharge of contaminants into the CMA. Policy 22 in particular is of relevance to this proposal and requires the assessment and monitoring of sedimentation levels and impacts upon the CMA. Policy 22(2) requires that development and use not result in a significant increase in sedimentation in the CMA or other coastal waters. I note here that Dr Stewart raises concerns the potential that sediments may persist in the water column, once released from disposal site AO, with associated lowering of light penetration and flow on effects for recruitment and growth of algae, especially when combined with sediments already within the environment⁵⁵. Policy 22(1) seeks that sedimentation levels and impacts on the coastal environment are assessed and monitored. In my opinion, with an appropriate adaptive management process in place, which is supported by a detailed baseline monitoring assessment, the policy outcome under Policy 22 can be achieved. As I have noted previously, however, I think that the adaptive management mechanism proposed by the Applicant requires further development to provide the requisite level of certainty and caution.

7.13 I accept, and agree with the contention put to you by both the reporting officer, and Dr Mitchell⁵⁶ that the Proposal is broadly consistent with the objectives and policies of the NZCPS, especially those relating to Port developments.

7.14 In having regard to the evidence of Dr Stewart and Mr Little, the disposal aspect of both the Incremental Capital Works and the Major Capital Works programme at disposal site AO raises clear tensions with a number of policies relating to other uses which are reliant upon the CMA and living marine resources. In my opinion, this tension needs to be both acknowledged and an

⁵² James at paragraph 133 states that most benthic animals in the immediate disposal area would not survive smothering during a major capital dredging programme (1.1 to 1.7 m depth on average over the dredging period or 15 mm/d).

⁵³ Policy 11(b)(iv) seeks to protect indigenous biological diversity in the coastal environment and avoid, remedy or mitigate other adverse effects of activities on habitats of indigenous species in the coastal environment that are important for recreational, commercial, traditional or cultural purposes.

⁵⁴ Refer paragraph 103 of Mr Boyd's evidence.

⁵⁵ Refer paragraph 5.13 of Dr Stewart's evidence.

⁵⁶ Refer paragraph 3.37 of Dr Mitchell's evidence.

assessment undertaken of the effect that the Proposal will have on the local trawler fishermen of Blueskin Bay. The evidence before me is that such an effect is significant, and may result in existing fishing operations becoming uneconomic. Consequently, it is something that in my opinion weighs against the Proposal securing consent.

REGIONAL POLICY STATEMENT FOR OTAGO

- 7.15 I have had regard to the relevant objectives and policies within the Regional Policy Statement for Otago (RPS) in the Officers report and generally agree with the conclusions reached at paragraphs 465 to 471.

SECTION 104(1)(B)(V) REGIONAL PLAN: COAST FOR OTAGO

- 7.16 The Reporting officer sets out a detailed analysis of the relevant objectives and policies contained within the Regional Plan: Coast for Otago ('RPC'), and therefore I do not propose to repeat all of the relevant objectives and policies here. I will make comment where I have any divergent views.

- 7.17 Under Chapter 5 – Coastal Management Policy 5.4.1 seeks to recognize areas, such as Blueskin Bay identified within Schedule 2.1 as Coastal Protection Areas ('CPA') within Otago's coastal marine area. In highlighting earlier that parties agree that Blueskin Bay is a locally and regionally important fishery, it is important to highlight that the RPC only recognises Blueskin Bay⁵⁷ as having important fishery values, in respect to estuarine values.

- 7.18 In relation to chapter 9 –Alterations to the foreshore and seabed, Policy 9.4.5 seeks to ensure the area to be disturbed during any operation altering the foreshore or seabed will be limited as far as practicable to the area necessary to carry out that operation. I note that the Reporting officer states at paragraph 490, *"that the area of disturbance will be limited to that required to upgrade the navigation channel and extend the Multipurpose Wharf and construct the Fishing jetty"*. In my opinion, this is misleading. The RPC defines disturbance as *"any activity, which damages or destroys the foreshore or seabed in a manner that is likely to have an adverse effect on plants or animals or their habitats and includes any excavation, dredging, drilling and tunneling"*. It is clear that the disposal of dredging material will have an adverse effect on plants and animals underlying disposal area AO and indeed wider areas due to the dynamic processes influencing the direction of sediment entrainment. Reinforcing this point, Dr Stewart highlights that disposal site AO has an area of 314ha (area of circle 2km in diameter), which will accommodate the majority of spoil from the dredging project, however using only the maximum settlement rate suggested by the Applicant⁵⁸ it seems probable that up to five times that area is likely to be adversely affected by spoil deposition⁵⁹. Therefore, while the application before you seeks to limit, as far as practicable the area necessary to carry out this operation, there are practical limitations to managing the deposition of this dredge material and importantly controlling the manner in which it settles. This is certainly the case

⁵⁷ CPA 11 relates to Blueskin Bay, however only recognizes estuarine values, which include important feeding areas for wetland birds and nursery for flatfish. The inlet is a significant habitat for shellfish such as cockles.

⁵⁸ Refer Figure 12.24 from Bell *et al.* (2009) (Figure 6).

⁵⁹ Refer paragraph 5.4 of Dr Stewart's evidence.

for clays and fine silts, which may stay suspended in the water column for a significant period of time as discussed in the evidence of Dr Stewart. In my opinion, the disposal of fine silts and clays is contrary Policy 9.4.5, given that any disturbance to the seabed will not be limited as far as practicable to the area necessary to carry out this operation.

Chapter 10 -Discharges

- 7.19** Objective 10.3.3 seeks to safeguard the life-supporting capacity of Otago's coastal marine area. Reason for adopting this objective sets out that the life-supporting capacity of the coastal marine area is important to Otago's communities which variously derive economic, social and cultural rewards from having healthy and diverse ecological systems. As set out above, the Proposal fails to safeguard the life-supporting capacity of the CMA by reason of its adverse effects on living marine resources, which will at least for the short to medium term be adversely affected. Given the reliance on these resources by people and components of the community (the fishing industry) to provide for their social, economic and cultural wellbeing, health and safety, I do not consider that this policy is complied with.
- 7.20** In reaching a conclusion, it is my understanding that one objective or policy cannot be viewed in isolation to the remainder of the plan and used as a basis to determine solely that a proposal is contrary to objectives and policies. I have set out above, the evidence before me is that the Proposal will have the potential to result in significant effects on the existing fishing operations, with the potential that they may become uneconomic. Furthermore, Dr Stewart has concluded that the Proposal will result in significant impacts upon the biota of the Harbour and Blueskin Bay⁶⁰. Consequently, these matters in my opinion weighs against the Proposal securing consent.

SECTION 104(1)(B) OTHER MATTERS

Consideration of Alternatives

- 7.21** The Fourth Schedule of the RMA, Clause 1 identifies the aspects that should be included in an AEE. Clause 1(b) states that;
"Where it is likely that an activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity".
- 7.22** I have considered the report (prepared by Andy Pullar -Port Otago Ltd - and Stuart Hughes - Stuart Hughes Associates Ltd) and entitled "*Dredging Methodology and Disposal Alternatives*" and dated December 2009, which sets out the assessment of alternative disposal options. I agree that given the quantities involved that there are practical limitations associated with disposing dredging material from the Major Capital Works, in particular, to land. I note that the report goes into some detail and discusses examples of reclamation and concludes that this is not considered a viable option for the Port.
- 7.23** The presentation by Mr Gilmour of the Lobster Association and expanded upon within the evidence of Mr Hayden has signalled a desire to see the fine

⁶⁰ Refer paragraph 6.2 of Dr Stewart's evidence.

sediments removed from disposal site AO and deposited in a series of islands and beaches at the head of the harbour. Mr Gilmour requests that this alternative option be further investigated by the Port as part of the Lobster Association submission. While this alternative disposal option does not form part of this application, it highlights the willingness of stakeholders to find a solution that addresses their concerns. I understand discussions about this alternative proposal have been undertaken with the Applicant and that this has not been completely ruled out by the Port. I accept, however, that we are dealing with the merits of the application before you and that the consideration of alternative disposal sites may raise issues as to the scope of the applications and the ability of the same to include an additional site.

7.24 If, however, the Committee concludes that the disposal activities associated with the Proposal would result in unacceptable adverse environmental effects and these effects can not be adequately avoided, remedied or mitigated, then I would urge the consideration of alternative disposal options, such as that recommended by Mr Gilmour and Mr Hayden. It follows, in my opinion that such a conclusion would result in the Committee deferring the determination on the Major Capital Works (works covered within Phase 2)⁶¹ until a more detailed feasibility study of this alternative disposal option had been investigated and reported back to the Panel.

7.25 I am acutely aware that there is a need to advance a decision on the applications that are before the Committee. Having reviewed the evidence before me, however, it is quite apparent that a key issue for a number of the submitters⁶² is the disposal of such large volumes of clay and fine silts at disposal site AO. It follows that avoiding the disposal of these sediments into Blueskin Bay would go some way to resolving a number of the concerns that have been raised.

New Zealand Guidelines for Sea Disposal of Waste

7.26 In relation to other matters considered under section 104(1)(c) of the Act, in my opinion the New Zealand Guidelines for Sea Disposal of Waste⁶³ ('**Guidelines**'), is a relevant matter under this section of the Act.

7.27 Section 2.0 includes information that should be gathered on other uses that may be affected by the dumping, such as fishing. Section 2.5 sets out the importance of assessing other uses of the area, including commercial fishing which may be affected significantly by sea dumping in a number of ways. The Guidelines set out that:
"commercially important biota may leave areas that are used as dump sites, and areas significant to the ecology of important species (e.g. nursery or spawning grounds) may be affected, thus indirectly affecting fishers".

7.28 You have heard evidence on the importance of this commercial fishery and the reliance on Blueskin Bay by a number of local fishermen who are reliant upon this local fishery. This in my opinion should have formed an important consideration in selecting this site and in identifying necessary measures to

⁶¹ This is because the Major Capital Works contain the largest volumes of fine sediments and clays to be disposed of at disposal site AO.

⁶² The Lobster Association, Paua and Kina Industry Council's, PauaMac5, Southern Clams Limited.

⁶³ Advisory Circular Part 180: Dumping of Waste or Other Matter Issue No. 180-1 30 June 1999

offset the impacts on these parties. In my opinion, the Application has failed to appropriately define the nature and extent of the impact on the local fishing industry, and seek to avoid, remedy or mitigate these effects.

PART 2 OF THE ACT

8.0 Section 104 and the relevant provisions set out above are subject to Part 2.

Section 5 of the Act

8.1 I return to the purpose of the Act, which defines “sustainable management” under section 5(2) as:

—managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while—

(a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

(b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and

(c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.

8.2 Each paragraph of section 5(2)(a), (b), and (c) are to be afforded full significance and applied accordingly in the circumstances of the particular case so that the promotion of the Act’s purpose may be effectively achieved.

8.3 Achieving that outcome in these circumstances requires integrating the various matters that have been raised within the Application, in evidence and the concerns presented to you by submitters.

8.4 Section 5(2)(a) is clear that when enabling people and communities to provide for their wellbeing, health and safety, the potential of the natural and physical resources must be sustained to “meet the reasonably foreseeable needs of future generations”. In my opinion, it is clear that certain aspects may prevail over others in analysing the details of this Proposal. The enabling aspects of the Proposal in promoting regional and district communities to provide for social, economic and cultural wellbeing, in my view is a significant factor in reaching a conclusion. The policy assessment undertaken by the Reporting officer, Dr Mitchell and myself all acknowledge the importance of the Port and need to provide for the future expansion of this significant resource.

8.5 However, it is clear that not all of the aspects of this Proposal can be considered appropriate and will give rise to significant adverse effects, at least in the short to medium term on offshore benthic communities, upon which the commercial fishing industry are reliant upon. While the evidence of the Applicant’s witnesses identifies that the loss of the fishing ground within and around disposal site AO will not be permanent, it will nonetheless unduly fetter the local fishing industry and its members and potentially compromise the operation of a number of smaller trawl boats, such that their operations would become uneconomic.

- 8.6** Caselaw has identified that any effects, which are more than minimal must be had regard to in the overall evaluation, which must occur under Part 2 of the Act and section 5 in particular⁶⁴.
- 8.7** Dr Stewart concludes that the Proposal will result in a significant adverse effect on the biota within Otago Harbour and in Blueskin Bay. Having reviewed the evidence before me, I agree with this conclusion. In this regard, the application clearly fails to safeguard ecosystems under section 5(b) of the Act.
- 8.8** In relation to the sustainable management of these resources, ultimately, the application is reliant on a framework of conditions in order to ensure that the disposal plume will not result in significant adverse effects, and as such the proposal gives rise to matters under section 5(c) of the Act, which seeks to remedy, avoid or mitigate adverse effects on the environment.

Environmental Management Plan

- 8.9** The disposal plume, as set out above, has the potential to adversely effect marine ecosystems and living marine resources. The Applicant has recently tabled a draft EMP, which sets out the adaptive management approach that is proposed to ensure that these ecosystems are not adversely effected.
- 8.10** The adaptive management approach as set out at paragraph 12 of the EMP, is a positive response to the complex ecological and coastal processes that are raised by the disposal component of the application. As I have noted, the evidence before me points towards the existing environmental baseline being inadequately understood. The absence of clear (explicit) thresholds that if achieved, necessitate action, is also a weakness of the adaptive management mechanism that has been put to the Panel.
- 8.11** It is my understanding that the Applicant considers all of the relevant issues associated with potential effects on fisheries can be addressed by the draft consent conditions and the proposed EMP⁶⁵. As I have set out above, the EMP and the adaptive management approach embodied within this plan, does not avoid, remedy or mitigate the effects on those local trawlers who may be directly and significantly affected, potentially to the point where they are put out of business.

Sections 6, 7 and 8

- 8.12** In consideration of matters raised under Section 6 of the Act, I agree with the Reporting officer that the proposal will not offend against Section 6(a). I note that Dr Stewart highlights the importance of the shell banks within the harbour and recommends an appropriate response to ensure that regard is given to addressing any adverse effects on these features of national importance⁶⁶.
- 8.13** Section 6(c) provides for the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna. Section 6(e) of the Act provides recognition of the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga. These

⁶⁴ Pllu v Hutt City Council W8/2006 para 42.

⁶⁵ Refer paragraph 20 of Mr Boyd's evidence.

⁶⁶ Refer paragraphs 4.20-4.24 of Dr Stewart's evidence.

matters have been thoroughly addressed by the Reporting officer and in my opinion have been provided for within the suit of conditions proposed, including the adaptive management approach adopted within the EMP.

- 8.14** In relation to Section 7 matters, I concur with the Reporting officer over those matters that regard has to be had to.⁶⁷
- 8.15** As indicated earlier, the Proposal will provide for the efficient use and development of the Port infrastructure as provided for under section 7(b).
- 8.16** In considering the effects of this Proposal regard has been given to the intrinsic values of ecosystems under section 7(d), a matter, which is clearly at the heart of how marine habitats respond to increases in suspended sediments. The quality of the receiving environment under section 7(f) is a matter that has been given consideration to within the Application and whether the sediment plume will adversely affect the CMA of Blueskin Bay and wider coastal environs. It is clear that the marine habitats and living marine species are a finite resource, a matter that has been discussed above. The tension raised by the dumping of spoil on existing fishing grounds is a matter discussed in detail within this evidence and is a relevant matter to which regard has been had under section 7(g) of the Act.

Section 105

- 8.17** In relation to the discharge aspects of the Proposal, Section 105 of the Act requires regard to be had to the nature of the discharge, the sensitivity of the receiving environment, the reasons for the proposed discharge, and any possible alternative methods of discharge. There is the potential that the adaptive management approach, underpinned with a framework of baseline monitoring could address a number of the concerns raised by some of the parties in relation to the effects of increased sedimentation. However, presently the existing environmental baseline is inadequately understood to fully rely upon this as a mechanism to address the effects of this Proposal at this point in time. As indicated above, it has been concluded that the Proposal will give rise to significant adverse effects on the local receiving environment, which will in turn impact upon the local trawling industry.

9.0 SUMMARY

- 9.1** Having considered all the matters raised by this Proposal, it is my opinion that the Application fails to promote the single purpose of the Act, that is, it fails to provide for the sustainable management of natural and physical resources, in a way, and at a rate, which enables people (and components of the community) to provide for their social, economic and cultural wellbeing, and for their health and safety, and importantly fails to remedy, avoid or mitigate the adverse effects raised by this Proposal on these people. I conclude that the

⁶⁷ (a) kaitiakitanga:

- (aa) the ethic of stewardship:
- (b) the efficient use and development of natural and physical resources:
- (c) the maintenance and enhancement of amenity values:
- (d) intrinsic values of ecosystems:
- (f) maintenance and enhancement of the quality of the environment:
- (g) any finite characteristics of natural and physical resources.

lack of mitigation to offset the adverse effects of this Proposal on the local trawler industry militates against the grant to these applications.

9.2 It is my opinion, that consent be deferred pending the following:

- A detailed cost benefit analysis addressing the impacts upon the local trawling industry and how this can best address the potential impacts on local fishers by way of an appropriate “mitigation package”. This assessment should be undertaken by an independent consultant and be presented to the Panel. Importantly, this information because it is of a confidential nature should be made available to the Applicant and those parties directly affected by this assessment;
- Having regard to the conclusions reached above, relating to the ecological effects and effects on the local commercial fishery associated with disposing clays and fine silts on area AO, I would recommend that the Port undertake a detailed feasibility study investigating the potential of an alternative disposal option at the head of the harbour, as a means to avoid the disposal of the larger proportion of silts and clays within Blueskin Bay.
- Should the Panel agree with the conclusions reached that the evidence before you points towards the existing environmental baseline being inadequately understood, then it would be my recommendation that baseline monitoring be undertaken for a minimum 12-month monitoring programme to establish baseline conditions within Blueskin Bay (12 months to ensure that all seasons are accommodated). If however, the Panel agrees that the baseline monitoring can be undertaken as part of the implementation of the EMP, I would recommend that the EMP be amended such that there should be no implementation of the Major Capital Works until a 12 month monitoring programme is completed and threshold limits agreed between parties.

9.3 I have had regard to the recommendations made by Dr Stewart in relation to recommended amendments to the conditions, which I agree with.

9.4 I am happy to answer any questions from the Panel.

Nigel Bryce

18th April 2011

APPENDIX 1 – SUMMARY OF ISSUES

i) Ecological Effects

The Application fails to properly address the effects of the activity on the offshore and inshore ecology, including benthic communities.

In particular parties consider that the disposal of fine silts at disposal area AO will have a detrimental effect on marine habitats from suspended sediments, moving north and inshore effecting water quality and increasing turbidity and having a 'blanket effect' on kelp beds, which support many marine species. This will in turn have adverse effects on the valuable Rock Lobster and Paua fishery in this area.

The marine ecology effects, and the accuracy of some of the applicants claims in relation to the same, are addressed within the evidence of Dr Stewart on behalf of the Collective.

ii) Impacts on Commercial Fish Resource

Disposal of dredging material will likely have an impact upon all commercial fishing activities, including Fin Fish, Crayfish and Paua and all other forms of fishing activity undertaken in proximity to disposal area AO.

No definitive baseline monitoring has been undertaken to underpin the application.

No detailed analysis has been undertaken of the loss or potential loss of fishing to fishers, particularly local trawler operators. The undue adverse effects on fishing activities have not been properly taken in account. No effective research has been completed into effects the dumping will have on the importance of Sole and the Elephant fishery to local commercial fishing vessels.

iii) Consultation

Insufficient consultation has been carried out in respect of the impact on fishing and fisheries resources or commercial fishing activities.

iv) Consideration of Alternatives

The submission of the Rock Lobster Association provided for conditional support subject to conditions, which have not been provided for. Consideration of an alternative disposal option including the reestablishment of intertidal salt marsh and beach front areas within upper Otago Harbour should be investigated as an alternative to this Proposal⁶⁸.

⁶⁸ The Fourth Schedule of the RMA, Clause 1 identifies the aspects that should be included in an assessment of environmental effects (AEE). Clause 1(b) states that;

v) Sustainable Management

The Collective consider that the proposal is contrary to the purpose and principles of the Resource Management Act 1991. Specifically it will impede the ability of the existing seafood industry to provide for its social, economic and cultural well being now, and in the future.

The Collective consider that the proposal does not have sufficient regard to the efficient use and development of natural and physical resources as required under section 7(b) of the Act.

vi) Mitigation of Adverse Effects

The proposal does not avoid, remedy or mitigate adverse effects on people and communities, particularly that component of the fishing industry affected by this Proposal and conditions have not been carried through that appropriately address the full concerns of the Collective.

APPENDIX 2 – OVERVIEW OF THE SUBMITTERS

Paua industry Council and PauaMac5

Paua Industry Council Limited

PICL is the national umbrella service agency for the five regional commercial stakeholder groups representing commercial paua fishery's interests. Each regional representative group (PauaMAC – derived from the Quota Management System designation for paua, and Management Area Council) draws membership and majority mandate from fishing and non-fishing quota owners, ACE holders, permit holders, processors and exporters from within the seven designated management areas.

The Paua Industry Council, an opposing submitter to this application oversees the interest of the local paua industry, who have an active presence within the Blueskin Bay.

PAUAMAC5 (Paua Management Area 5 Council) Industry Association is recognised as the stakeholder organisation representing the interests of commercial paua industry in the coastal waters of Southland, Stewart Island, Otago and Fiordland which includes Quota Management Areas PAU5A(Fiordland), PAU 5B (Stewart Island)and PAU 5D(Otago/Southland). The PICL represent all commercial interests in the fishery including Maori commercial fishing interests, quota owners, ACE (Annual Catch Entitlement) holders and divers.

The commercial paua fishery in the southern part of the South Island is divided into three Quota Management Areas (QMA) of which about 31% of New Zealand's paua catch is taken in total. The QMA that may be affected by the Port application is Pau5D, which is bounded in the north by the Waitaki River mouth and in the south by the Waiau. Pau5D comprises approximately 8.5% of the national catch and has a total allowable catch of 89 tonnes and there are 51 individuals or companies who own quota in Pau5D. The total income value of paua exports to NZ in 2009 was over \$NZ48m, of which export income values of paua harvested from Pau5D are about \$NZ5m. Importantly, most of the catch is processed locally in Dunedin or Bluff.

While the Pau5D QMA covers a large coastline, around 518km, much of it is unavailable to commercial paua fishing⁶⁹. Therefore those remaining are extremely important to the overall health of the fishery.

The Kina Industry Council

The Kina Industry Council (KIC) represents the generic interests of the New Zealand kina industry, including commercial fishers, quota owners and processors. Our interest in the Port Otago Ltd coastal permit applications stems largely from our concerns that adverse effects on kina, paua and seaweed resources and the wider seafood industry have not been adequately identified, evaluated and avoided remedied or mitigated. There is currently no commercial fishing for kina in the affected areas due to historic closures by regulation. It is however the intention of KIC to explore the removal of regulations to allow for future sustainable development of commercial kina fishing. Kina interests wish to ensure that the application for coastal

⁶⁹ Some 223km are closed by regulation and a further 20.5km through industry observed voluntary closures. A significant part of the coastline remaining is sandy beaches lacking in the rocky reef systems which make up paua habitat.

permits does not have an effect on the future potential of commercial kina fishing in the area.

The New Zealand Federation of Commercial Fishermen

The New Zealand Federation of Commercial Fishermen, "**The Federation**", is a national body that represents the interests of owner-operator commercial fishermen in New Zealand. The Federation represents members' interests at national, regional and local association levels and, where appropriate, on an individual basis. It also works with and supports the various inshore finfish fishery commercial stakeholder organisations in protecting and enhancing the access and property rights of the commercial fishing industry. The Federation is opposed to this application, particularly relating to its impacts upon the local trawler industry.