

IN THE MATTER OF

The Resource Management Act 1991

AND

IN THE MATTER OF

An application by Zane Smith and James Maass-Barrett for a coastal permit to occupy the coastal marine area with structures, disturb the seabed, and deposit marine debris (shell and organic matter) and to discharge contaminants associated with marine farming into the coastal marine area at Big Glory Bay, Stewart Island.

REPORT AND DECISION OF INDEPENDENT HEARING COMMISSIONER

Sharon McGarry

27 November 2019

Heard on the 16 September 2019

Council Chambers in the offices of the Southland Regional Council,
Corner of North Road and Price Street, Invercargill.

Representations and Appearances

Applicant:

Mr J. Engel, Resource Management Consultant and Manager (Bonisch Environmental)

Mr J. Maass-Barrett, Marine Farmer

Mr Z. Smith, Marine Farmer

Submitters:

Sanford Limited

- **Ms J. Appleyard**, Counsel (Chapman Tripp)
- **Dr P. Mitchell**, Resource Management Consultant (Mitchell Daysh Limited)
- **Mr C. Chia**, Chief Executive Officer (Sanford Limited)
- **Mr M. Mandeno**, Mussel Farming Manger (Sanford Limited)
- **Mr J. Swart**, Salmon Farm Manager (Sanford Limited)
- **Mr J. Eriksson**, Vessel Manager (Sanford Limited)
- **Mr P. Schofield**, Marine Farmer

Section 42A Reporting Officers:

Mr A. MacLennan, Senior Resource Management Consultant (Incite (Chch) Limited)

It is the decision of the Southland Regional Council, pursuant to sections 104, 104D, 105 and 107, and subject to Part 2 of the Resource Management Act 1991, to **GRANT**, in part, Coastal Permit APP20181316 to place and fix structures to the seabed and occupy the coastal marine area, disturb the seabed, and deposit marine debris (shell and organic matter) and to discharge contaminants associated with marine farming into the coastal marine area at Big Glory Bay, Stewart Island.

BACKGROUND AND PROCEDURAL MATTERS

1. This is the report and decision of independent Hearing Commissioner Sharon McGarry. I was appointed by the Southland Regional Council (**SR**C or 'the Council') to hear and decide an application by Zane Smith and James Maass-Barrett ('the Applicant') pursuant to the Resource Management Act 1991 (**RMA** or 'the Act') for resource consent to establish and operate three new marine farm sites in Big Glory Bay, Stewart Island.
2. The application was lodged on 3 May 2018.
3. The application was subject to two section 37A extensions to the timeframes granted by the Council to enable technical review of the application before notification.
4. Further information was requested by the Council under section 92 on 5 June 2018. The Applicant provided further information on 17 August 2018 and submitted an amended plan for the location of the three proposed sites.
5. A second further information request under section 92 was made by the Council on 8 November 2018. The Applicant provided the further information on 12 December 2018.
6. The application was publicly notified on 7 February 2019. Five submissions were received within the submission period. One late submission was received on 5 April 2019 and was granted a waiver under section 37.
7. The processing of the application was put on hold under section 36AAB(2) until 29 April 2019 because the Applicant had not paid the required hearing deposit.
8. Processing of the application was suspended twice under section 91A, at the Applicant's request.
9. The overall processing timeframe for a notified application set under section 103A of the Act was extended under section 37 from 9 July 2019 until 2 August 2019, at the request of the Applicant to enable additional time for the Applicant to meet with submitters and avoid the need for a hearing.
10. The submission from Te Ao Marama Incorporated on behalf of Te Rūnunga o Awarua was formally withdrawn by written notice on 5 July 2019.
11. Another submission from Mr Graeme Wright on behalf of Barnes Wild Bluff Oysters was formally withdrawn by written notice on 12 July 2019.
12. The timeframe was further extended under section 37A until 20 September 2019, with the agreement of the Applicant, to enable a hearing date to be set.
13. A letter from Mr Peter Schofield was received on 26 August 2019 requesting the ability to make a late submission and be heard at a hearing, on the basis that he was not directly notified of the application as an affected party.
14. I sought written comment from the Reporting Officer on receiving the further late submission and asked that the letter be forwarded to the Applicant seeking agreement to accept the late submission. No response was received. I noted the Reporting Officer's comments that the application had been publicly notified in the Southland Times and that the matters raised (phytoplankton carrying capacity and biosecurity issues) would be addressed at the hearing. Having taken into account the matters set out in section 37A(1), I did not grant a waiver to accept a late submission from Mr Schofield.

15. Prior to the hearing, a report was produced pursuant to section 42A of the Act by the Council's Reporting Officer, Mr Andrew Maclennan. This 's42A Report' included technical reviews of the application by Dr Emma Newcombe (Coastal Ecologist, Cawthron Institute) and Mr Rob Davidson (Marine Biologist, Davidson Environmental Limited), and comment from the Council's Harbourmaster, Mr Lyndon Cleaver.
16. The s42A Report provided an analysis of the matters requiring consideration and stated that the application could be granted with appropriate conditions. Attached to the Report was a set of recommended consent conditions.
17. The s42A Report, the Applicant's evidence and submitter expert evidence were pre-circulated prior to the hearing in accordance with section 103B of the Act. This evidence was pre-read prior to the hearing and was 'taken as read' at the hearing.
18. Four statements of non-expert evidence on behalf of Sanford Limited were provided to the Council on Friday 13 September 2019. While not required by section 103B of the Act, I requested that these were circulated to the parties.
19. On Saturday 14 September 2019, I received an email from Mr John Engel on behalf of the Applicant requesting a postponement of the hearing. The email noted the new evidence contained in the circulated statements of evidence and requested time to enable a response.
20. On the same day, I also received an email (followed up by a phone call) from Ms Jo Appleyard, Counsel for Sanford Limited, requesting that I urgently address the Applicant's request for a postponement of the hearing given the significant costs involved in having their witnesses attend the hearing.
21. I responded to the Applicant's request to postpone the hearing by way of Minute #1 (dated 14 September 2019), informing the parties that the Applicant's request for an adjournment was refused on the basis the Applicant had the ability to respond within the hearing process and the need to process the application without undue delay.
22. The hearing commenced at 10.00am on Monday 16 September 2019. At the commencement of the hearing, I briefly addressed procedural matters dealt with by Minute 1 and the need for a further section 37 extension to enable the hearing to be completed.
23. Ms Appleyard provided written legal submissions on behalf of Sanford Limited addressing three procedural matters. The first procedural matter raised related to notification and the requirement to serve notice on all affected parties; and the failure to serve notice on all consent holders in Big Glory Bay, including Mr Schofield and Mr Jeff Walker. The second procedural matter raised related to the 'uncertain and inaccurate' location of the proposed new sites, changes made to the application map in response to the section 92 request, and use of the incorrect map for notification. The third procedural matter raised related to the Applicant's obligations under the Marine and Coastal Access (Takutai Moana) Act 2011 (**MACA Act**) to notify and seek the views of any MACA Act claimant before lodging a resource consent application.
24. Ms Appleyard submitted that '*the combined effect of the procedural irregularities is that there is a real risk of prejudice to Sanford and other parties who operate alongside it in Big Glory Bay*'.¹

¹ Legal Submissions on behalf of Sanfords (dated 16 September 2019), para. 9, pg. 2

25. Mr Engel responded verbally on behalf of the Applicant at the hearing to the procedural matters raised by Sanford Ltd and provided a written response following the hearing adjournment. He noted the co-ordinates provided related to the New Zealand Transverse Mercator 200 grid, which is the grid required on the application forms. He confirmed the Eastings and Northings provided in a further information response (dated 17 August 2019) were correct and were located in Big Glory Bay. He confirmed the correct co-ordinates and amended map had been provided prior to notification. He noted it was at the Council's discretion as to who was directly notified of an application.
26. Mr Barrett confirmed that the Council's website had used the wrong map and that he had made the Council aware of this during the notification period. However, he noted the correct co-ordinates and correct map were provided in the Applicant's section 92 response and were available on the website.
27. In response to questions, Mr Engel confirmed it was the Applicant's view that the hearing should proceed and that these procedural matters should be considered within the context of the section 104 consideration of the application.
28. In his further statement of evidence, following the adjournment, Mr Engel acknowledged the Applicant had not notified the MACA Act claimants prior to lodging the application, but that they had notified Ngāi Tahu Whanau shortly after it was lodged. In addressing the requirement, he stated he relied on the information provided on the website for the Office for Māori Crown Relation (**OMCR**), which he now understands was an error. He stated the OMCR site identified Ngāi Tahu Whanau and Mr Cletus Maanu Paul as claimants, but noted the OMCR had declined to engage with Mr Paul and that there was no need for resource applicants to seek his views. He confirmed that now he had been made aware of additional claimants by Ms Appleyard, copies of the application had been sent to Mr Paul and the New Zealand Māori Council/Te Kaunihera o Aotearoa. He reiterated his view that this matter should not delay processing of the application; and highlighted the application had been publicly notified and that Ngati Tahu Whanau had been notified early in the process.
29. The Council's Reporting Officer, Mr Maclennan, also responded verbally to the procedural matters raised at the hearing. He acknowledged he had mistakenly used the original (incorrect) map in the s42A Report instead of the revised map. He confirmed the correct co-ordinates were used in the public notification notice, but could not confirm the which map was used. He confirmed that the expert reviewers had used the updated information and amended (correct) map in making their assessments. He noted the Harbourmaster had reviewed the original map and requested the opportunity for him to have a look at the amended map in conjunction with the relevant statements of evidence regarding navigational safety matters. He noted the application had been publicly notified and provided a copy of a legal opinion² the Council received regarding the relationship between Regulation 10 and sections 95A, 95B and 95E of the Act, in relation to an application that was publicly notified at an applicant's request under section 95A. He considered this legal opinion suggested there is no need to directly notify affected parties if the application is publicly notified. He said he was unsure of the implications of a failure to notify claimants under the MACA Act and asked if he could address this in a written addendum to the s42A Report. He was of the view the hearing should proceed and the procedural matters raised considered under section 104 of the Act.
30. In response to questions, Mr Maclennan considered the hearing should proceed and the procedural matters raised addressed as part of my section 104 consideration.

² Email from Mr Mike Doesburg, Senior Associate with Wynn Williams dated 20 December 2018

31. In his Addendum to the s42A Report (dated 9 October 2019), Mr MacLennan confirmed that the information associated with the application, as shown on the Council's website, had clearly shown the progression of the application and the amended coordinates. He considered that despite the use of the original (incorrect) map in the s42A Report, there was sufficient information to understand the location of the application sites. He provided a list of the parties directly notified of the application, and noted these had included the statutory parties required to be notified pursuant to Regulation 10 of the Act and the owners of the marine farm sites directly adjoining each of the three proposed sites. He considered the Council had exercised its discretion as to who it decided was an 'affected person' and therefore no procedural matter arose. He referred to the legal opinion of Mr Doesburg that a failure to notify a claimant under the MACA Act would not render an application incomplete under section 88 of the RMA or stop the processing of the application.
32. I informed the parties that the hearing would proceed and that I would consider the procedural matters raised as part of my section 104 considerations of the application.
33. The hearing was adjourned at 6.10pm the same day following the presentation of submitter evidence. The hearing was adjourned enable the Reporting Officer to provide an Addendum to the s42A Report addressing the evidence presented, for me to undertake a site visit, and for the Applicant to provide a written right of reply.
34. Due to inclement weather on 17 September 2019, I undertook a site visit on Friday 20 September 2019. I was taken out to Big Glory Bay by Mr Zane Smith and Mr Jim Maass-Barrett, and was also accompanied by Mr Jason Eriksson (on behalf of Sanford Limited), and the Council's Harbourmaster Mr Lyndon Cleaver and Deputy Harbourmaster, Mr Ian Coard. We identified the co-ordinates of each proposed site and orientated the approximate position of each site relative to the existing sites. We viewed the existing marine farms within Big Glory Bay and visited the main salmon growing farm, which was located on Sanford Limited's Site 340. The tide was low during our visit and the weather was calm and fine. I would like to thank all the participants for their time and conduct during the site visit. It was very informative.
35. On 23 September 2019, I issued Minute #2 setting out a timeframe for the provision of:
 - i. further information on the existing navigational lighting and assessment of phytoplankton carrying capacity in Big Glory Bay from the Applicant;
 - ii. an Addendum to the s42A Report from the Reporting Officer;
 - iii. further written comment on the further information from the submitter;
 - iv. a final recommendation from the Reporting Officer; and
 - v. a written right of reply from the Applicant.
36. The timeframe was further extended under section 37A until 2 November 2019, with the agreement of the Applicant, to accommodate the timeframe for further information and a written right of reply, as set out in Minute #2.
37. The Applicant's written right of reply was provided on 31 October 2019.
38. I formally closed the hearing on 6 November 2019.

THE APPLICATION

39. This application documentation stated resource consent is sought to undertake the activity of marine farming on three new sites for the purposes of growing green-lipped mussels (*Perna canaliculus*) in the same manner as other existing mussel farms. The application stated the species to be farmed also included blue mussels (*Mytilus galloprovincialis*), ribbed mussels (*Aulacomya ater*), scallop (*Pecten novaezelandiae*) and oysters (*Ostrea chilensis*)³. It noted the proposal included:
- (a) the placement of structures (mooring blocks, steel anchors, backbone ropes, buoys, and suspended ropes, baskets and trays, and navigational lights) on and over the seabed;
 - (b) disturbance of the seabed;
 - (c) non-exclusive occupation of the coastal marine area (CMA);
 - (d) occasional mooring of a vessel and barge for site set up, harvesting and maintenance work;
 - (e) deposition of shell material and other organic material (pseudo faeces); and
 - (f) discharge of water associated with harvesting.
40. The application proposed the use of a conventional long-line system, with ropes and/or baskets and trays suspended from standard double backbone lines that are moored to be bed with either screw anchors or large concrete blocks, coupled to large steel Danforth style anchors.
41. The application stated that in assessing the effects of the proposal, the Applicant relied on recent scientific studies in other locations, results of monitoring in Big Glory Bay, a benthic survey of the seabed under the proposed locations, and any lack of any significant effects from the existing farms on water quality and the seabed beneath the farms shown by monitoring surveys.
42. The Applicant sought a consent term of approximately 20 years, with an expiry date of 1 January 2040. The application noted the other consents for all existing marine farms within Big Glory Bay would expire on 1 January 2025. It stated that a concurrent expiry with these consents would be too short to provide security for a new development, therefore it had been assumed that the other consents for marine farming would be granted for a further 15 years.
43. The application and Assessment of Environmental Effects (AEE) included a site plan, hydrographic map, fairway map, and sketches of the proposed layout of structures. Appended was a copy of a report titled 'Baseline Benthic Survey of three proposed mussel sites in Big Glory Bay, Stewart Island' by NIWA prepared for Jim Maass-Barrett and Zane Smith dated December 2017.
44. In response to the Council's first section 92 request for further information, the Applicant provided corrected coordinates for the proposed sites, further description of the proposed activities, further information on potential effects and details on current monitoring undertaken in the bay.

DESCRIPTION OF THE ENVIRONMENT

45. The application documentation and s42A Report provided a description of the existing environment at Big Glory Bay. This is not repeated here.
46. Sanfords Limited provided information at the hearing regarding their existing marine farming consents and the recently granted resource consents to increase salmon production in Big Glory Bay.

NOTIFICATION AND SUBMISSIONS

47. The application was publicly notified on 31 March 2017 and a number of parties were directly served a copy of the application.

³ Oyster species were formally removed from the application by the Applicant prior to the hearing.

48. A total of six submissions were received, including one late submission which was granted a section 37 waiver. Two submission were neutral and four submissions were in opposition to the application. All submissions received indicated they wished to be heard.
49. Two submissions were withdrawn prior to the hearing. One submitter, the Department of Conservation, withdrew their wish to be heard by letter dated 25 July 2019.
50. The s42A Report accurately summarised the submissions (pages 6-7). I adopt the summary and do not repeat it in this decision.

THE HEARING

Applicant's Case

51. **Mr John Engel**, a Resource Management Consultant and Manager with Bonisch Environmental, conducted the Applicant's case and provided a statement of evidence. His evidence described the consents applied for and the proposed activities, summarised the potential adverse effects, analysed the statutory documents and discussed the objectives and policies of the relevant plans. His evidence addressed navigation and safety, effects on hydrodynamics and biosecurity. He confirmed that oysters were no longer included in the application and that exclusive occupation of the CMA was not applied for. He concluded the proposal would have no more than minor adverse effects on the environment and was consistent with the objectives of the relevant statutory plans. He considered the application should therefore be granted with conditions. Appended to his evidence were copies of the relevant provisions of the New Zealand Coastal Policy Statement (**NZCPS**), the Regional Policy Statement (**RPS**) and the Regional Coastal Plan (**RCP**).
52. **Mr Jim Maass-Barrett**, a marine farmer operator in Big Glory Bay, provided a statement of evidence outlining the application and the assessment of potential effects on the environment. He discussed problems with past nitrogen (**N**) budget modelling and use of incorrect assumptions. He outlined increases in N loads from the planned salmon farming increases and the need to mitigate these with increased mussel production. Appended to his statement were notes on the Biosecurity Management Plan (**BMP**) and a draft BMP.
53. As requested during the hearing, Mr Engel provided a further statement of evidence (2 October 2019) following the adjournment. His statement addressed the procedural matters raised and provided a further statement of evidence from Mr Maass-Barrett and Mr Smith addressing phytoplankton carrying capacity in the bay, mussel production and existing navigational lights and consideration of the Pelagic Effects Assessment Criterion from the Aquaculture Stewardship Council ('ASC criterion').

Submitters

54. **Ms Jo Appleyard**, conducted Sanford Limited's case in opposition to the application by presenting opening legal submissions and calling six witnesses. Ms Appleyard advised that the statement of evidence prepared by Mr Ted Culley (General Manager Aquaculture, Sanford Limited) would be read in two parts by Mr Clement Chia and Mr Michael Mandeno because Mr Culley had been hospitalised. She also advised that an existing marine farmer in Big Glory Bay, Mr Schofield, who had not been notified of the application and had not been able to lodge a submission, would be called as a witness.
55. Ms Appleyard's legal submissions addressed procedural matters, Sanford Limited's position in Big Glory Bay, assessment of the existing environment, inadequate information, navigation,

hydrodynamics, cumulative effects, the precautionary approach, inconsistency with the relevant objectives and policies, and the non-complying status of the activities. She concluded the application must be declined due to the various procedural irregularities, section 104(3)(d) requirements, inadequate information, potential adverse effects which were more than minor, and that the proposal was contrary to the objectives and policies of the relevant statutory plans.

56. As requested, following the hearing adjournment, Ms Appleyard provided a Memorandum of Counsel (dated 23 September 2019) providing details of the two witnesses who formally adopted the evidence of Mr Culley, a copy of Sanford Limited's farm rotation plan, and submissions on the role of the Ministry of Primary Industries (**MPI**) in marine farm consenting.
57. On 16 October 2019, Ms Appleyard provided further submissions, a statement of evidence from Dr Hartstein and a supplementary statement of evidence from Dr Mitchell in response to the Applicant's further information and the Addendum to the s42A Report provided after the adjournment of the hearing. She submitted the evidence of Dr Hartstein should be given considerable weight given his experience and familiarity with Big Glory Bay and reiterated the procedural matters raised. She highlighted the Harbourmaster's comments regarding proposed Sites 1 and 3, and that there had been no amendment to the application to address these concerns. She submitted the application failed to pass either gateway test of section 104D and could therefore not be granted.
58. Ms Appleyard also provided a Memorandum of Counsel on behalf of Sanford Limited (dated 25 October 2019) in response to the Reporting Officer's final recommendations and proposed conditions. She raised concern that the Applicant had not provided any expert evidence and that the scientific analysis provided by the Reporting Officer after the hearing had not been explored or tested properly. She submitted this raised significant natural justice issues, which compounded the other procedural issues raised.
59. **Dr Philip Mitchell**, an Environmental Consultant with Michell Daysh Limited, provided a statement of evidence addressing the statutory tests, Sanford Limited's concerns, the relevant planning documents, the Applicant's planning evidence and the s42A Report. He concluded that the proposal failed to pass either of the gateway tests of section 104D and therefore the consents sought could not be granted. He considered the proposal did not meet the requirements of section 104 and would not promote sustainable management, and should therefore be declined.
60. Dr Mitchell's supplementary statement of evidence (dated 16 October 2019) addressed the Addendum to the s42A Report and further information. He stated his conclusions remained unchanged and that the application did not meet either gateway test of section 104D
61. **Mr Jit Hui (Clement) Chia**, Chief Operating Officer for Sanford Limited, adopted and read part of the statement of evidence prepared by Mr Culley. His evidence addressed the company's corporate profile, mussel business, commitment to sustainability, sustainability principles, aquaculture activities in Big Glory Bay, resource consents held, and Sanford Limited's Big Glory Bay brand.
62. **Mr Michael Mandeno**, Mussel Farming Manager (Havelock) for Sanford Limited, adopted and read part of the statement of evidence prepared by Mr Culley. His evidence addressed Sanford Limited's concerns in relation to effects on water circulation and navigation effects. Appended to his statement of evidence was a letter to Mr Culley (undated) from Dr Neil Hartstein and an email from Mr Ivan Gorton, Gorton's Fisheries L.T.D (dated 7 September 2019).
63. **Mr Jaco Swart**, Big Glory Bay Salmon Farm Manager for Sanford Limited, read a statement of evidence describing the salmon farming operation as it exists now and how it would change overtime, and outlined how the proposed activities would affect the salmon farming operation. He

explained that by 2022 there would be five farm areas, not three as currently, and that there will be much more activity with additional barges and vessels servicing the farms. Appended to his evidence was an information sheet titled 'Fast Tracking Seabed Recovery'.

64. **Mr Jason Eriksson**, Vessel Manager of the Bluff fleet for Sanford Limited, read a statement of evidence describing vessel movements in the bay and the current navigational challenges faced. He considered the bay was a busy place with Sanford Limited and other operators undertaking day to day operations and ongoing servicing of the farms. He stated his primary concern was with access between and around the bay, particularly with the large size of the vessels and the safe operating space required.
65. **Mr Peter Schofield**, of Schofield Sea Farms and a marine farm operator in Big Glory Bay, was called as a witness by Sanford Limited to enable his concerns to be heard. Mr Schofield read out a statement of evidence outlining his three marine farms (Site 318, Site 319 and Site 342) and his experience in marine farming the bay. He was concerned that an additional 16 ha of marine farm space may undo the work, investment and goodwill built up in the community; and would have cumulative effects on the environment. He requested the application be declined.
66. **Dr Neil Hartstein**, a Senior Oceanographer for Aquadynamic Solutions (**ADS**), provided a statement of evidence (dated 16 October 2019) in response to the further information from the Applicant and the NIWA Report⁴.

Section 42A Report

67. **Mr Andrew MacLennan**, a Senior Resource Management Consultant for Incite (Chch) Limited, tabled his s42A Report at the hearing, but did not have the opportunity to speak to his report. He noted the request to the Applicant to provide further information and requested the opportunity to provide an Addendum to the s42A Report addressing the matters raised at the hearing and the further information yet to be provided. He advised he would provide the Harbourmaster with the evidence presented in relation to navigation and safety, and the existing environment, and would seek technical comment. He also requested the ability to provide a final recommendation and comment on proposed conditions following receipt of further comment from submitters.
68. Mr MacLennan provided an Addendum to the s42A Report on 9 October 2019 addressing the procedural matters raised, the existing environment, navigation and safety, biosecurity, cumulative effects on carrying capacity, hydrodynamic effects, relevant objectives and policies, and the location of mooring blocks. Appended to the Addendum were copies of an email dated 20 December 2018 from Mr Doesburg (Wyn Williams) providing legal advice on notification procedures (as Appendix 1); a memorandum from Mr Doesburg providing legal advice on the implications on a failure to notify claimants under the MACA Act and potential occupation rights over the navigation routes between marine farm sites (as Appendix 2); technical comment from the Harbourmaster dated 7 October 2019 (Appendix 3); and a NIWA Report (as Appendix 4).
69. Mr MacLennan provided a 'final comments and recommendation report' on 23 October 2019. He concluded that in its current form, the navigation effects of proposed Site 1 and Site 3 would be more than minor; and that due to the duty to avoid adverse effects on navigation safety the current application would be inconsistent with the direction of the RCP. However, he stated that if the Applicant amended the scope of the application, in line with the concerns raised by the Harbourmaster, to address navigation risk, this would change his assessment of the application.

⁴ NIWA Report prepared for the Southland Regional Council titled 'Comment on the cumulative effects of proposed mussel farms in Big Glory Bay' dated October 2019

Appended to his final report was a Memo from Dr Stenton-Dozey (dated 23 October 2019), a corrected 'Version 2' of the NIWA Report (as Appendix 1) and a Memorandum from Mr Doesburg dated 21 October 2019 (as Appendix 2).

Applicant's Right of Reply

70. The Applicant provided rebuttal evidence from Mr Engel, Mr Maass-Barrett and Mr Smith addressing the movement of salmon cages, navigation and safety, and ecological carrying capacity. Mr Engel also addressed legal submissions, the existing environment and the provisions of the relevant planning documents.

ASSESSMENT

71. In assessing the application, I have considered the application documentation and AEE, the s42A Report and technical reviews, expert evidence, all submissions received and the all evidence provided during and after the hearing adjournment. I have summarised this evidence above. I record I have considered all the issues raised in making my determination.
72. I have considered Option 1 and Option 2, as proposed by the Applicant in the right of reply, in response to the further technical comment from the Harbourmaster. I consider Option 1 to be outside the scope of the application as notified given the relocation of proposed Site 3. I do not accept the submissions of Mr Engel that the new location can be considered as part of this application and note that the effects of this new site have not been assessed. I consider Option 2 to be within the scope of the application, as notified, given the amendments to proposed Site 1 reduces the size of the site. However, I do not consider an increase in the size of proposed Site 2, under Option 1, would be within the scope of the application, as notified. I have therefore assessed the application based on the final amendments made in the Applicant's closing submissions and as shown in Option 2, with no increase in the size of proposed Site 2.

Procedural Matters

73. I have considered the concerns raised by Sanford Limited and Mr Schofield regarding direct notification of affected parties. I consider it is at the Council's discretion to determine whether the application should be publicly notified and who may be potentially affected party. In this case, the Council decided the application should be publicly notified and that consent holders adjoining the proposed sites were potentially affected parties. I accept this decision and consider section 104(3)(d) does not apply given the application was publicly notified.
74. I have considered the concerns raised by Sanford Limited that confusing and incorrect co-ordinates and the wrong (original) map was used for notification. I am satisfied the co-ordinates used for notification were the correct (as amended in the s92 response dated 17 August 2018). I note that the link to the map provided on the Council's was to the wrong map and that this was an error by the Council. However, I consider the information in the notification was sufficient to understand the nature and scale of the proposed activities, and the general location of the new sites. I accept the co-ordinates by the Applicant relate to the Council's GIS system and were considered appropriate for use in notification.
75. I have considered the concerns raised by Sanford Limited in relation to use of the wrong map in the section 42A Report and whether this map had been used by the expert and technical reviewers in making their assessments. I am satisfied the Reporting Officer has confirmed the expert reviewers have used the amended plan and the further information contained in the section 92 responses.

76. I have considered the concern raised by Sanford Limited that the Applicant failed to notify and seek the views of claimants under the MACA Act. I consider that in this case it is not a matter that would warrant refusal of consent.
77. I have also considered concerns raised by Ms Appleyard of ‘significant natural justice issues’ relating to the scientific analyses provided with the Addendum to the s42A Report after the hearing and the ‘corrected’ NIWA Report (Version 2) provided with the Reporting Officer’s final recommendation. I consider the further information process directed by me, way of minute, was sufficient to enable all parties the opportunity to respond to the further information requested during the hearing process. In particular, I am satisfied that Sanford Limited had the opportunity to provide rebuttal evidence addressing the further information provided by the Applicant and the Reporting Officer. I do not agree that provision of the ‘corrected’ NIWA Report following the rebuttal evidence from Dr Hartstein contained ‘substantial new information’. I do not accept the provisions of further information following the adjournment resulted in any prejudice to any parties or significant issues of natural justice.
78. While I agree with Ms Appleyard that it is the Applicant’s responsibility to provide adequate information, I note that the Act enables the provision of further information from any person during the hearing process. I requested further information from all parties throughout the hearing and all parties were given the opportunity to respond to any new information.
79. Overall, I find there are no procedural matters, either singularly or in combination, that would warrant re-notification of the application or the refusal of the consents sought.

Status of the Application

80. The starting point for my assessment of the application is to determine the status of the proposed activities under the statutory planning provisions.
81. The s42A Report classified the activity as a non-complying activity under Rule 9.1.1, which relates to the deliberate introduction of exotic and indigenous fauna that is not sourced from the coastal waters of Stewart Island.
82. Mr Engel noted that Rule 15.1.7 of the RCP is specific to marine farming and covers most of the activities (structures, disturbance of the seabed, mooring, and deposition on the seabed) associated with it and that it is not necessary to refer to the other separate rules for these associated activities. He agreed that under Rule 9.1.1 the activity was classified as non-complying due to sourcing mussel spat from Northland. He noted that this had been overlooked in preparing the application and had also been overlooked for all previous marine farm applications. However, he agreed with the Reporting Officer that it was appropriate to bundle the activities and consider the overall status of the application as a non-complying activity.
83. Dr Mitchell agreed with Mr Engel and the Reporting Officer that the activities should be bundled and considered as non-complying activities pursuant to Rule 9.1.1 of the RCP.
84. I agree that associated marine farming activities should be bundled and the application considered as a **non-complying activity**.

Statutory Considerations

85. In terms of my responsibility for giving consideration to the application, I am required to have regard to the matters listed in sections 104, 104D, 105 and 107 of the Act.
86. Pursuant to section 104(1), and subject to Part 2 of the Act, which contains the Act's purpose and principles, I must have regard to-
- (a) *Any actual and potential effects on the environment of allowing the activity;*
 - (ab) *Any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity;*
 - (b) *Any relevant provisions of a national environmental standard, other regulations, a national policy statement, a New Zealand coastal policy statement, a regional policy statement or a proposed regional policy statement, a plan or proposed plan; and*
 - (c) *Any other matters the consent authority considers relevant and reasonably necessary to determine the application.*
87. Section 104(2) states that when forming an opinion for the purposes of section 104(1)(a), I 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. This is referred to as consideration of the 'permitted baseline'. No party drew my attention to any relevant permitted activities. I record I have not applied any permitted baseline in making my assessment.
88. Section 104(3)(a)(i) states that when considering the application, I must not have regard to trade competition or the effects of trade competition. It was acknowledged by Ms Appleyard and Dr Mitchell that Sandford Limited (as well as other mussel farmers in Big Glory Bay) is a trade competitor. However, both submitted that the concerns raised in relation to effects on navigational safety, hydrodynamics and ecological carrying capacity were not related to matters of trade competition. I record I have not had any regard to potential adverse effects on the trade of mussel farming in Big Glory Bay. I acknowledge that mussel growth rates are part of the wider assessment of potential effects on the ecological carrying capacity of Big Glory Bay.
89. Section 104(3)(d) states that I must not grant consent if the application should have been notified. I consider this does not apply given the application was publicly notified.
8. In making my assessment under section 104D(1) of the Act, I can only grant consent for a non-complying activity, if either or both of the following 'gateway tests' is passed:
- (a) *The adverse effects of the activity on the environment will be minor; or*
 - (b) *The application is for an activity that will not be contrary to the objectives and policies of –*
 - (i) *the relevant plan, if there is a plan but no proposed plan in respect of the activity; or*
 - (ii) *the relevant proposed plan, if there is both a plan and a proposed plan in respect of the activity; or*
 - (iii) *both the relevant plan and the relevant proposed plan, if there is both a plan and a proposed plan in respect of the activity.*
90. In terms of section 105, when considering section 15 (discharge) matters, I must, in addition to section 104(1), have regard to-
- (a) *The nature of the discharge and the sensitivity of the receiving environment to adverse effects; and*

- (b) *The applicant's reason for the proposed choice; and*
- (c) *Any possible alternative methods of discharge, including discharge to any other receiving environment.*

91. In terms of section 107(1), I am prevented from granting consent allowing any discharge into a receiving environment which would, after reasonable mixing, give rise to all or any of the following effects, unless the exceptions in section 107(2) apply⁵ -

- (c) *The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended material:*
- (d) *Any conspicuous change in the colour or visual clarity:*
- (e) *Any emission of objectionable odour:*
- (f) *The rendering of fresh water unsuitable for consumption by farm animals:*
- (g) *Any significant adverse effects on aquatic life.*

92. Under section 108, if I grant consent, I may impose conditions under section 108.

93. I consider each of these sections of the RMA separately below.

SECTION 104(1)(a) - ACTUAL AND POTENTIAL EFFECTS ON THE ENVIRONMENT

The Existing Environment

94. In making my assessment, I am required to consider the actual and potential effects of the activities on the existing environment. The existing environment is that which exists at the time this determination is made and includes lawful existing activities, permitted activities and activities authorised by existing resource consents.
95. I confirm I have taken into account the existing environment as it exists with the full implementation of the recently granted consents for Sanford Limited to significantly increase salmon farming operations in Big Glory Bay. In considering the actual and potential effects of these authorised future developments, I have relied on the evidence of Sanford Limited, the resource consents granted (including conditions and the fallowing and rotation plan⁶), and the evidence of the Council.
96. In terms of matters of fact, in relation to the existing environment, it was agreed at the hearing that Big Glory Bay is approximately 1,200 ha and that 35 existing consented marine farms cover approximately 161.5 ha, which is approximately 13 percent of the bay. It was also agreed that the existing environment includes existing consents for farming salmon at 10 sites, totalling 45.5 ha; and existing consents for farming shellfish at 25 sites, totalling 116 ha. It was also agreed that Sanford Limited's consents authorise both salmon and shellfish farming at 10 sites, and that fallowing⁷ a site may include farming shellfish.
97. I accept that the existing consents authorise the number of salmon farm areas, in use at any one time, to increase from three to five, and that the intensity of salmon farming is planned to double by 2024.

⁵ The exceptions being:

- (a) that exceptional circumstances justify the granting of the permit; or
- (b) that the discharge is of a temporary nature; or
- (c) that the discharge is associated with necessary maintenance work— and that it is consistent with the purpose of this Act to do so.

⁶ Sanford Limited Fallowing and Rotation Plan (dated 21/1/2016)

⁷ A process involving moving the salmon pens from one location to another, resulting in the cessation of salmon farming to allow enriched sediments time to remediate by natural processes (Sanford Limited Fallowing and Rotation Plan (21/1/2016)).

98. I am satisfied the Reporting Officer has correctly taken into account the existing resource consents, as fully implemented, in making his assessment and conclusions.

Actual and Potential Environmental Effects

99. The s42A Report considered the following actual and potential effects:
- (a) Occupation;
 - (b) Landscape, visual amenity and natural character;
 - (c) Ecological carrying capacity;
 - (d) Wildlife;
 - (e) Water quality;
 - (f) Benthic environment and indigenous biodiversity;
 - (g) Cultural values;
 - (h) Biosecurity; and
 - (i) Benthic survey and monitoring.
100. The s42A Report concluded that the potential adverse effects of the proposal could be adequately mitigated, provided the recommended conditions of consent were imposed.
101. I accept the view of the Applicant that the environmental effects of marine farming in New Zealand water are reasonably well studied and understood. On the basis of the evidence presented, I accept that potential and actual adverse effects on water quality, the benthic environment and aquatic ecosystems from marine farming at the existing marine farm site are likely to be minor and localised.
102. I accept that concerns raised in submissions regarding biosecurity matters have been addressed by removing oyster species from the list of species to be farmed. I accept that any risk posed from the farming of marine species, which are not endemic to Stewart Island, is not changed given the existing marine farm operations and the fact these farmed species are now found in the 'wild' in Big Glory Bay. I am mindful that it is this issue that triggers the non-complying status of the proposed activities. Overall, I agree with the Reporting Officer that these risks can be mitigated by preparation and implementation of a Biosecurity Management Plan (BMP) and can be addressed by the imposition of an appropriate condition.
103. Overall, I adopt the s42A Report and Addendum conclusion that any potential adverse effects on landscape, visual amenity and natural character, wildlife, water quality, the benthic environment and indigenous biodiversity, values and biosecurity are likely to be minor or less than minor. I agree that these can be appropriately avoided and mitigated through the imposition of conditions. I accept that issues relating to matters of biosecurity can be addressed by the imposition of consent conditions and compliance with the appropriate industry codes of good practice.
104. I have considered the effects of the occupation of space on public access to and along the CMA. I find there will be no adverse effect on public access to and along the CMA given the existing level of marine farming in Big Glory Bay, the gaps between sites and provision of sufficient navigation channels. I consider the effects of the occupation in relation to navigational safety and the exercise of existing consents below.
105. I acknowledge that any potential adverse effects on tangata whenua and cultural values is closely related to my findings in relation to effects on ecological values, water quality, recreation and access to the CMA.

106. I have no evidence to suggest that the application will adversely affect tangata whenua and cultural values. I note the application site is within the Rakiura/Te Ara A Kiwa (Stewart Island/Foveaux Strait) CMA, which is recognised as a Statutory Acknowledgement Area under Schedule 104 of the Ngāi Tahu Claims and Settlement Act 1998. I note the s42A Report stated there are no heritage or archaeological sites identified within the vicinity of the application site. I also note that submission from Te Ao Marama Incorporated on behalf of Te Rūnunga o Awarua was withdrawn following confirmation from the application that oyster species would not be grown on the proposed sites. On this basis, I accept that any adverse effects on tangata whenua values and relationships will be no more than minor.
107. On the basis of the evidence presented, I find the application will result in positive socio-economic effects for the Applicant and those involved in the marine farming industry. I have had regard to these in making my overall determination.
108. On the basis of the evidence presented and the conclusions of the s42A Report and Addendum, I consider that with the imposition of consent conditions, the actual and potential adverse effects are primarily cumulative effects on the hydrodynamics and ecological carrying capacity of the bay, effects on navigational safety, and effects on the exercise of existing consents.

Effects on hydrodynamics and ecological carrying capacity

109. Concerns have been raised about the cumulative effect of the application on the hydrodynamics in Big Glory Bay and the ecological carrying capacity of the bay, in terms of the availability of phytoplankton.
110. The Applicant's first section 92 response (dated 17 August 2019) referred to an early nitrogen (N) budget model, prepared by Dr Rick Pridmore in the 1990s to assess the N output from mussel and salmon farms in Big Glory Bay. The Applicant stated the assumptions on which the model was based were now known to be flawed due to the fact no allowance was made for the N removed when mussels were harvested, annual mussel production was assumed to be very high, and the three yearly harvest cycle was not taken into account.
111. The Applicant's section 92 response also referred to a report title '*Summary Carrying Capacity Assessment of Big Glory Bay*' by DHI for Sanford Limited in 2011; and monitoring work undertaken for Sanford Limited by Aquadynamic Solutions (ADS) in 2015/2016 and 2016/2017, which showed 'missing' N in the system. The Applicant stated that these reports and Sanford Limited's latest application document titled '*Big Glory Bay Carrying Capacity Update, Stewart Island, New Zealand*' Volume 1 – Summary of Findings October 2017 provided evidence that there was a large consumption of N from mussel farming, which had not been accounted for in previous N budget models, and that this proved there was spare capacity for more mussel farming in the bay, without exceeding the ecological carrying capacity.
112. In relation to hydrodynamic effects, the Applicant referred to a study in Golden Bay by Plew (2005)⁸ and concluded that due to weak currents in Big Glory Bay, any impact of the proposed sites would be no more than minor.
113. The Applicant's second section 92 response (date 12 December 2018) stated that historically high levels of mussel farming had occurred in the bay in the early 2000s until 2011, when Sanford Limited

⁸ Plew D. R (2005) '*The Hydrodynamic Effects of Long-line Mussel Farms*'.

shifted the main salmon grower farm from Site 320 to Site 249 and removed 12 ha of mussel lines. It stated that prior to this, there would have been 148 ha of mussel farms and that currently there was 125 ha. It stated this would be reduced further with the increase salmon farming and the fallowing of sites; and that more mussel farming would be needed in the future to mitigate the effects on increased phytoplankton production in the bay. It stated that even with the additional proposed new sites historic levels of mussel production would not be exceeded.

114. Mr Engel noted that notwithstanding the presence of marine farming, the overall water quality in Big Glory Bay remains high. He noted that the empirical data (Pridmore model, annual monitoring reports and Sanford Limited's ADS Report) for the bay indicated there was sufficient capacity for the three proposed sites. In relying on this information and the information provided in the application documentation, he concluded the effects of the proposal would 'no more than minor'. He considered this to be conservative given the effects were arguably 'less than minor', but that he had allowed for some uncertainty in relation to the Pridmore Report and the modelling assumptions in ADS Report.
115. Mr Maass-Barrett noted that two of the three proposed sites had been granted consent in April 1997, but that these consents had lapsed after the Ministry of Fisheries (now MPI) had declined to permit marine farming on the sites. He referred to the N model developed by Dr Pridmore, which was used at that time to determine a safe level of salmon production in the bay. He noted that, at that time, it was believed that mussels were net contributors of N due to the release of waste patches found under farms. He stated this had since been demonstrated to be incorrect⁹ and that shellfish farms cause a net loss of N when the mussels are harvested.¹⁰ He highlighted there were other assumptions in the Pridmore N budget model that were untested, such as assuming productivity in the bay was in the order of 100 tonnes of mussels per hectare per year (**t/ha/yr**), when in reality some sites would struggle to produce 30 t/ha/yr. He noted the probable yields were assumed to be harvested each year, when in reality it was close to a three yearly cycle to reach harvestable size. In addition, he noted the Ministry of Fisheries had assumed N inputs from both mussels and salmon farming occurring simultaneously, where a site was authorised for both species, when in reality it is not physically possible to farm both species in the same space. He considered the circumstances assumed in 1997 had changed dramatically with more knowledge and experience.
116. Mr Maass-Barrett explained the proposed orientation of the mussel lines would be generally aligned with the prevailing wind and current to avoid impeding water circulation and flow. He noted that water currents in the bay were weak, unless wind driven. He stated that water would slow down through marine farm sites, but speed up under and around structures to compensate creating localised effects. He considered this would help mix grazed and ungrazed water once it left the farm. He was of the view phytoplankton distributions within the bay was not an issue. He noted that N concentrations were considered to be the limiting factor for phytoplankton production in the bay and that Sanford Limited's increase in salmon production would significantly increase the N loading and increased chlorophyll-*a* levels. He noted that the ADS Report from Sanford Limited's application stated mussel farms would act indirectly as mitigation measures by consuming algae as they grow from the additional loading from the fish farms. He suggested it was a matter of how to 'crop' the extra potential phytoplankton production. He noted a number of sites would no longer hold mussels and provided a table showing former mussel farms which were now vacant of mussels. He considered the increase in N loadings and decrease in mussel farming hectares would be a 'double

⁹ Cawthron Report 1285 'Review of Ecological Effects of Finfish Farming'

¹⁰ Cawthron Report, Dr Emma Newcombe (pg.2)

whammy’ on the amount of N available for phytoplankton production. He calculated the decrease in mussels farming would be approximately 18-29 ha less than the peak extent reached several years ago. He considered the amount of mussel production would need to be increased to help balance the aquatic ecosystem.

117. Mr Mandeno stated that the production from mussel sites within Big Glory Bay was already very slow, taking 3.5 to 4 years to grow mussels to marketable size. He noted this was twice as long as anywhere else in New Zealand and was a function of where the spat was sourced from (Ninety Mile Beach, Northland) and low current speed limiting phytoplankton availability. He considered further mussel development would only exacerbate this and that advice received from Dr Hartstein suggested that an additional 16 hectares of mussel farms may alter hydrodynamic processes in Big Glory Bay. He considered the Applicant had provided no information to alleviate these concerns.
118. Mr Mandeno stated Sanford Limited’s development plans did not rely on the presence of mussels in the bay for mitigation of N inputs. He noted the effect of mussels removing nitrogen from the bay was not incorporated into Sanford Limited’s AEE modelling that supported the recent grant of consents to increase salmon production.
119. Mr Swart stated that the proposed sites were located such that water flows in Big Glory Bay would inevitably be restricted to the detriment of the salmon farms and the health of the fish. He considered the Applicant’s evidence did not address these concerns.
120. Mr Schofield raised similar concerns. He noted water flows in the bay are slow moving and that the semi enclosed bay took many days to fully flush. He considered there had not been sufficient regard given to climate changes and that over summer in 2019 conditions had been unusually calm for two months.
121. Mr Schofield noted the slow growing time for mussels in Big Glory Bay, compared to other parts of New Zealand, and suggested there should be a cap on new development. He said his records of growth rates from 1995-2005 showed similar growth rates to other areas for the first 18 months and then a decline to the three-year cycle, as more mussels were grown in the bay. He said the decline in growth rates flattened out in 2000 when the bay was filled with mussels. He stated it was ‘extraordinary’ that the Reporting Officer would recommend that these new sites would not be considered with all the other marine farms in 2025, when all the existing consents expired. He noted a ‘gentlemen’s agreement’ on maximum stocking rates in the bay indicated that mussel growth rates had been adversely affected.
122. Dr Mitchell considered the shortcomings in the Applicant’s information in relation to hydrodynamics, productivity and effects on the water column, identified in the Davidson Environmental peer review undertaken on behalf of the Council, had not been addressed. He noted that the peer review undertaken by Cawthron had also raised concerns about cumulative effects and that the Applicant’s anecdotal evidence provided by Mr Engel did not address this. He considered the Reporting Officer had accepted this anecdotal evidence was sufficient to conclude the proposal would have a less than minor effect on the ecological carrying capacity of the bay, when there was no evidence to enable that conclusion to be made. He concluded there was insufficient information on the effects on hydrodynamics and phytoplankton levels to make an assessment on any cumulative effects.
123. Dr Mitchell noted that the Applicant’s assessment placed significant weight on the proposition that the proposed 16 ha of mussel farms would be less than had been accommodated in the past (due to Sanford Limited’s removal of 24 ha of mussels) and that the intensification of salmon farming would increase phytoplankton for the mussels to consume. He considered this represented the existing environment.

124. The further statement of evidence (dated 2 October 2019) from Messers Maass-Barrett and Smith noted the distinction between ‘production carrying capacity’ and ‘ecological carrying capacity’; and the need to ensure the level of marine farming was at a level where any ecological health effects are no more than minor. They highlighted Cawthron Report No. 1476 (April 2009) referenced in the application, and the complexities in estimating ecological carrying capacity and cumulative effects of mussel farming. They noted the information available on flushing time of the water in the bay and the fact the bay is only partially flushed after 28 days¹¹. They considered this guaranteed ungrazed ‘algal buffer stock’ remained in the residual water and could multiply speedily, as observed in the Cawthron monitoring data for the bay (see Attachment 1). They noted it was recognised that N was normally the limiting factor in phytoplankton production in New Zealand waters and that this would significantly increase with Sanford Limited’s increased salmon farming in the bay.
125. The further statement of evidence from the Applicant included figures of Big Glory Bay mussel production from 2008 – 2018 (Attachment 2), which showed mussel harvest yields peaked at 4,600 tonnes in 2012 and then fell steadily for three years. They explained this was partly caused by physical limitations of having extra mussel lines emptied in 2012 and there being less available for harvest for the next three years. They noted there was a mussel spat shortage from Ninety Mile Beach, which lasted until 2016, affecting the following three harvests. They noted that at the same time, Sanford Limited had moved the salmon farm from Site 249 and left it fallow without mussel lines, and that Site 246 was cleared of mussel lines to make way for the salmon farm. They also noted that the reduced harvest in 2018 (2,800 tonnes) was as a result of the MPI ordered oyster cull in July/August 2017, as mussels had been seeded with small oysters. They stated they were not aware of any increased time to harvest at times of high tonnages, and noted this was related to the colder water conditions and a winter dormancy period.
126. The Applicant’s further statement of evidence considered the ASC criterion and noted limitations with the approach as there was no way to make allowances for the large daily N inputs from salmon farming or to account for modifications to endemic flora and fauna since the 1970s. However, they noted Sanford Limited’s application documentation confirmed chlorophyll-*a* levels were predicted to rise from 1.5 micrograms per litre to ($\mu\text{g/l}$) 2.5 – 4.0 $\mu\text{g/l}$ ¹², which meant high levels of food would be available for primary production. They noted this increase in nutrient inputs had not been acknowledged by submitters who claim there were already too many mussel farms in the bay. They disputed the inference that growth rates in Big Glory Bay were lower because of too many mussels and remained of the view that lower temperatures (1-2 degrees Celsius) for a longer period than other areas were the biggest factor.
127. In his Addendum, Mr MacLennan provided an assessment of the cumulative effect of the application on hydrodynamics and the carrying capacity of Big Glory Bay by Dr Jeanie Stenton-Dozey, a marine ecosystem and aquaculture scientist and Dr David Plew, a hydrodynamics scientist for NIWA (Appendix 4 – ‘NIWA Report’). On the basis of the conclusions of the NIWA Report, Mr MacLennan concluded any cumulative effects of the application on hydrodynamics and the ecological carrying capacity of the bay would be minor.
128. The assessment of potential cumulative effects on the ecological carrying capacity of the bay undertaken by Dr Stenton-Dozey in the NIWA Report used the ASC criterion methodology to calculate the clearance time (CT) to retention time (RT) ratio. On the basis of her calculations, she

¹¹ ADS Carrying Capacity update, Volume 1 Summary of Findings, October 2017 for Sanford Limited’s consent application.

¹² Assessment of Environmental Effects by Aquatic Environmental Service, Part 2, 26 April 2018 for Sanford Limited.

- concluded that the addition of the three proposed mussel farms would not adversely affect the ecological carrying capacity of Big Glory Bay. She noted that mussel production would likely benefit to some extent from enhanced chlorophyll-*a* levels, which were predicted to rise from increased salmon production in the bay.
129. The assessment of potential hydrodynamic effects by Dr Plew in the NIWA Report considered the locations of the proposed farms and the increase in farmed area relative to the existing marine farms, and concluded any potential cumulative changes would be minor and relatively localised.
 130. Dr Hartstein reviewed the NIWA Report on behalf of Sanford Limited. He noted several fundamental errors in relation to the carrying capacity assessment undertaken by Dr Stenton-Dozey, due to the incorrect interpretation of the ASC criterion and what the proposed farms would mean in relation to the filtration rate of the bay. He appended his alternative calculation of the carrying capacity of the Big Glory Bay (as Appendix 1) and estimated the CT/RT ratio was 0.7-0.8, which he considered confirmed that proposed marine farms were likely to be beyond the carrying capacity of the bay.
 131. Dr Hartstein also reviewed the hydrodynamic assessment undertaken by Dr Plew and stated he generally agreed any reduction in currents and flow speed would be small; and that there would be little impact on the overall water circulation and flushing time in the bay. However, he considered that potential localised effects had been understated and remained unknown and not assessed.
 132. In his supplementary evidence, Dr Mitchell highlighted the evidence of Dr Hartstein that the carrying capacity would be exceeded and the evidence of Mr Culley and Mr Schofield on very slow growth rates of mussels in the bay compared to other areas in New Zealand. On this basis, he stated he was unable to reach the same conclusion as Mr MacLennan that the effects on carrying capacity would be minor.
 133. In his final recommendation report, Mr MacLennan relied on the Memo from Dr Stenton-Dozey and the updated NIWA Report ('Version 2'). He stated the updated assessment addressed the concerns raised by Dr Hartstein and that he accepted Dr Stenton-Dozey's evidence that the application's cumulative effects on carrying capacity would be minor.
 134. The memo from Dr Stenton-Dozey responded to the evidence of Dr Hartstein and her misinterpretation of the ASC criterion, due to time constraints in responding to my Minute #2. She clarified bivalve numbers should have been based on 'standing stock' and not 'harvested tonnage', which had resulted in a gross underestimate of mussel numbers and an overestimate of CT. She provided recalculations and corrected the NIWA Report and the executive summary to reflect her recalculations. She discussed 'in-bay phytoplankton primary production' and the rationale for the Tier 2 assessment under the ASC criterion, if the CT/RT ratio was less than 1.0. She noted there was no evidence of in-bay phytoplankton biomass (as measured by chlorophyll-*a* concentrations) depletion in Big Glory Bay from regular monitoring of chlorophyll-*a* concentrations undertaken over the period of 1997-2017.
 135. Dr Stenton-Dozey noted that the difference between her recalculations and Dr Hartstein's calculation related to differences in how low and high tide water volumes were calculated. She noted that for all scenarios shown on her Appendix A (including assuming all allocated marine farm space is used for mussel farming (161.5 ha) and existing marine farms plus the proposal (161.5 ha + 16 ha)) the CT/RT ratio was greater than 1.0. She therefore concluded, on the basis of her ASC criterion recalculations, that the addition of the proposed sites would have a minor cumulative impact of the ecological carrying capacity of the bay.

136. The rebuttal evidence of Mr Engel highlighted the assessment of Dr Stenton-Dozey, the evidence of Mr Maass-Barrett regarding previous levels of mussel farming within the bay, and the results of phytoplankton monitoring undertaken in the bay over many years. He noted that the results of the assessments were consistent with the lack of effects observed over the years of monitoring potential effects on ecological carrying capacity in the Big Glory Bay.
137. The rebuttal evidence of Mr Maass-Barrett re-iterated the view there was 'much in-bay production of phytoplankton, as evidenced by what occurs with mussel condition in the bay i.e. building up in spring and early summer, then maintaining condition right through the winter'. He noted this was supported by a study by Key 2001¹³ that showed Big Glory Bay mussels have greater condition than other mussels and are sought after in the market place. He considered there was little chance that phytoplankton levels and the general condition of the mussels would change given the predicted daily increases in N inputs from increased salmon farming.
138. Mr Maass-Barrett noted that Dr Stenton-Dozey's assessment errors, highlighted by Dr Hartstein, primarily related to a 'simple typo'. He noted that an assumed higher filtration rate would result in a higher level of conservatism. He noted the information provided by Sanford Limited for consent to increase salmon production showed chlorophyll-*a* levels had remained relatively consistent over the period 1998 to 2017. He considered it would be remarkable if chlorophyll-*a* levels did not increase in line with the predicted increase in nutrient inputs from salmon farming. He re-iterated the ASC criterion did not take into account inputs from in-bay sources (such as the salmon farms) and that this made the assessment conservative. He noted the assessment by Dr Hartstein had not used the inputs he had used in Sanford Limited's AEE (such as using an average depth of 15.9 m instead of the assumed 15 m depth and an assumed high tide volume of 180 million cubic metres instead of 201 million cubic metres). He considered these 'errors' were critical to Dr Hartstein's conclusions that the carrying capacity had been exceeded. He appended his own ASC criterion calculations using inputs taken from Sanford Limited's AEE and information from the hearing to produce two CT/RT ratios for two different assumed mussel densities. He clearly set out the source of all his inputs and the differences to Dr Hartstein's inputs. His results for the two scenarios were 1.05 and 1.26.
139. Mr Maass-Barrett noted the study by Key (2001) found a good relationship between mussel growth and temperature, with negligible growth in winter. He noted the water temperatures in Big Glory Bay were much lower than other marine farm areas around New Zealand, which affected growth rates and likely also constrained reproduction when temperature are below 13 degrees Celsius. He stated Key (2001) noted temperatures in Big Glory Bay were 1.5 degrees Celsius below the water of Foveaux Strait in winter during 1999-2000. He noted it was recognised that slow mussel growth in Big Glory Bay was due to lower water temperatures. He considered mussel growth was also closely linked to salmon production and that significant reductions in salmon farming had occurred in 1998, in conjunction with the development of new farm sites and El Nino weather patterns, resulting in a period of significantly lower mussel growth.

Findings

140. On the basis of the assessment of potential hydrodynamic effects undertaken by Dr Plew in the NIWA Report, I find that any cumulative effects on the hydrodynamics of the bay from the proposed sites are likely to be minor and localised given the locations of the proposed sites and the number and locations of the existing authorised marine farms in Big Glory Bay. I accept that the proposed orientation of the mussel lines will minimise any effects on hydrodynamics.

¹³ Key J.M. 2001 Thesis titled 'Growth and Condition of the Greenshell Mussel, *Perna canaliculus*, in Big Glory Bay, Stewart Island: Relationship with environmental parameters'.

141. I note that the ASC criterion uses calculations that compare how long it takes bivalves to clear a body of water ('Clearance Time' (CT)) versus the time it takes for tides to flush that body of water ('Retention Time' (RT)). I note that the criterion states that embayments or water bodies are deemed to be ecologically sustainable if the RT is less (water exchange faster) than the rate that the mussels consume phytoplankton in the water. I accept that a CT/RT ratio greater than 1.0 indicates that the ecological carrying capacity of an embayment has not been breached; and that conversely a CT/RT ratio less than 1.0 indicates that the ecological carrying capacity may be breached and that further study should be undertaken (Tier 2 assessment). I note it is appropriate to apply the criterion when the area of mussel farming in a bay exceeds 10 percent and this was the basis for requesting further assessment by application of the ASC criterion.
142. Overall, I accept that the ASC criterion recalculations undertaken by Dr Stenton-Dozey indicate that for all the scenarios assessed the CT/RT ratio would not be less than 1.0 and that this indicates the ecological carrying capacity of the Big Glory Bay would not be exceeded under any of the scenarios assessed. I accept the wording in her conclusion in 'Version 1' of the NIWA Report was a simple error where she stated '...not exceeding 1 was met', when her results clearly showed she meant a CT/RT ratio greater than 1.0 was met.
143. I note Dr Hartstein's alternative ASC criterion calculation (Appendix 1) to Dr Stenton-Dozey's first ASC criterion calculation and his conclusion that the ecological carrying capacity of the bay has been exceeded. I note his strong criticisms of Dr Stenton-Dozey's initial assessment and her conclusions. However, I note that the average water volumes used for low and high tide are not consistent with average depth and estimated mid tide water volume used in the AEE for Sanford Limited's recent application to increase salmon production.
144. I accept the ASC criterion recalculations of Dr Stenton-Dozey, for various scenarios, indicates the ecological carrying capacity of Big Glory Bay will not be exceeded by the addition of a further 16 ha of mussel farms. I am satisfied that results have a high level of conservatism given that for some of the scenarios it was assumed that all of the existing marine farms, totaling 161.5 ha, were used to farm mussels. However, I note it was agreed at the hearing that currently 116 ha were consented to farm mussels and 45.5 ha were consented to grow mussels or salmon. On the basis of the evidence regarding the existing operations and the planned increase in salmon operations, I consider that in reality only a portion of the 45.5 ha could actually be used at any one time to farm mussels.
145. I note the evidence of Dr Stenton-Dozey that it is likely that 'in-bay phytoplankton production' is an important source of food for mussels. I also note Dr Stenton-Dozey's review of the evidence of Dr Hartstein (March 2019) for Sanford Limited's application to increase salmon production and his prediction that total N inputs would increase by approximately 10 percent. I am mindful that the ASC criterion does not take into account any in-bay inputs of nutrients from the salmon farming and therefore accept this makes the assessment of the ecological carrying capacity even more conservative.
146. I record that even if I had preferred the ASC criterion calculation of Dr Hartstein and concluded the CT/RT ratio was less than 1.0, this would trigger the need for further assessment. Further assessment would involve site specific investigations of phytoplankton concentrations in the Bay. In this regard, I accept that phytoplankton biomass monitoring (measured as chlorophyll-*a*) undertaken from 1997-2017 shows no significant increase or decline, as the result of current or historical levels of mussel farming in Big Glory Bay.

147. I note the oral evidence provided by Mr Mandeno (not the written evidence prepared by Mr Culley, as stated by Dr Mitchell) and Mr Schofield relating to slow mussel growth rates, is consistent with the Applicant's evidence of a three-year cycle for mussels to meet harvestable size. I consider the evidence before me suggests this is closely linked to water temperature and sunlight. There is no evidence to suggest mussel growth rates in Big Glory Bay are currently controlled by mussel farming activity.
148. Overall, I find that the addition of 16 ha of mussel farming is likely to have no more than a minor effect on the ecological carrying capacity of Big Glory Bay.

Navigational safety

149. Mr Engel noted the RCP provided for a main access channel through the middle of the bay and that all marine farms were required to comply with Maritime New Zealand (MNZ) requirements for navigational aids. He considered any navigational risk would be mitigated by navigational aids attached to the farm structures. He stated that MNZ were notified of new consents, so that marine charts can be updated. He considered the area was known for its marine farms and that care was already needed to navigate through the area. He concluded the proposed three new sites would not increase the existing navigational risk and that any cumulative effect on navigation and safety would be less than minor.
150. Mr Mandeno noted Sanford Limited's concerns regarding navigation related to its ability to move people, vessels, fish, mussels and other equipment safely around Big Glory Bay in all weather. He noted the company was in the final stages of preparation for further development and that the application would prevent exercise of the existing consents and compliance with consent conditions.
151. Mr Swart outlined the additional salmon farms, barges and vessels, which would be operating in the bay and considered this would make the bay more complex to navigate. He considered the proposed new sites would seriously compromise their ability to navigate safely in and around Big Glory Bay.
152. Mr Schofield considered access to his Site 319 would be impeded and that that navigation by work boats, operating outside of the main navigation channel, had not been considered.
153. Mr Eriksson provided a table outlining the vessel movements in Big Glory Bay, including service vessels, water taxis, charter vessels, research vessels, private boats and cruise ships. He noted that an additional 16 ha of marine farms would need to be serviced by a permanent year-round vessel with a crew of 4-5 people. He emphasised the bay would get significantly busier with increased salmon farming and ongoing tourism. He stated that there were up to 12 vessels operating in the bay, five days of every week, and provided a photograph of a screen shot showing Sanford Limited's salmon farm vessels movements as by GPS tracks over a day (7 May 2019).
154. Mr Eriksson noted that Big Glory Bay used to be classified as a safe anchorage, but that this had probably been removed due to marine farm activity. He considered navigational issues were not addressed by keeping clear of the main navigational channel, as it was not shown on any maritime charts and that mariners do not use the Regional Coastal Plan map to navigate. He noted the latest marine chart (9 August 2019) incorrectly showed 30 marine farms and not 35 existing farms.

155. Mr Eriksson noted that aquaculture vessels do not stay in the middle of the bay and made multiple trips manoeuvring between sites and across the bay using the most direct route. He noted the warp lines were all outside the license areas and that care must be taken to avoid structures. He highlighted the large size of some of the service vessels (San Hauraki, Marine Countess and Foveaux Freighter) and the manoeuvring space needed to access the farms safely. In response to questions, he considered a minimum 80 m wide channel was needed between farms for safe vessel operation, particular if something went wrong or during inclement weather conditions.
156. Mr Eriksson highlighted the challenging weather conditions the vessels operate in and the number of strong wind days (above 20 knots). He noted the occurrence of thick fog in the bay and the difficulty in seeing marine farm structures in choppy sea conditions.
157. Mr Eriksson considered proposed Site 3 would make it extremely difficult to move the salmon farms from Site 340 and Site 339, particularly given the length of the warps. He outlined the challenges involved with moving the salmon farm pens as one unit and considered it would impossible to get the pens onto some sites if the proposed new sites went ahead. He said the amended locations would still create these restrictions affecting Site 249, Site 320, Site 321, Site 338, Site 366, Site 339, Site 474 and Site 340. He noted that in the past Sanford Limited had removed mussel lines to accommodate manoeuvres, but that this is not possible with another operator.
158. Dr Mitchell considered maintaining the main navigation channel did not address navigation within the bay and that the Harbourmaster's reasoning for his conclusions were unclear. On the basis of the evidence of Mr Eriksson, he concluded the proposed sites would affect the ability for working vessels to safely move around the bay. He concluded the effects of the proposal on navigation and navigational safety would be 'significantly adverse'.
159. The Applicant's further statement of evidence from Messers Smith and Maass-Barrett provided a table of navigational lights marking the main channel prepared by Mr Simon Marwick (dated 13 May 2008) and a plan showing the location of these (as Attachment 3). They noted not all lights were operational at the time of my site visit, but that they believed all lights were operational now. They stated that the proposed new sites would require additional lights to mark the channel.
160. In his Addendum, Mr MacLennan considered the safety of vessels operating within the bay from the proposed increase in vessel activity and reduced space for navigation. He highlighted the description of vessel movements and navigational challenges faced when operating a salmon farm in Big Glory Bay, as provided by the evidence of Mr Eriksson and Mr Swart. He provided further technical comment from the Harbourmaster (as Appendix 3) that concluded the additional vessel proposed for the application would not have a detrimental effect on navigation safety. On the basis of this evidence, he concluded the proposal would have a minor effect on the general navigation of Big Glory Bay.
161. Mr MacLennan also considered Sanford Limited's ability to move the existing salmon farm operation (grower farm) in one piece to fallow marine farm sites. He provided legal advice from Mr Doesburg (as Appendix 2) and highlighted Sanford Limited's existing consents did specify the method for moving the salmon cages. He noted there was no evidence provided by Sanford Limited as to whether there are practical alternative methods for fallowing their salmon sites; and that given the number of sites held by Sanford Limited, he considered it was unlikely a safe method of navigation between the sites could not be achieved, as required every two years or more often (as stated by Mr Eriksson). He referenced the technical comment from the Harbourmaster that proposed Site 1 could

be amended to allow sufficient space to the north of the site for safe navigation by vessels relocating salmon farms; that proposed Site 2 posed no navigation concerns for vessels relocating salmon farms; and that proposed Site 3 created the ‘most risk’ for vessels relocating salmon farms and was therefore not supported. He noted the Harbourmaster’s assessment assumed that the salmon cages needed to be moved together as one large unit and that no other marine farm would need to move to allow an alternative navigation path. He concluded it was difficult to see the potential effects on the relocation of the salmon farm without considering Sanford Limited’s response to the Harbourmaster’s further technical comments. He therefore reserved his final recommendation until he had considered further comment from Sanford Limited.

162. The further technical comment from the Harbourmaster (included as Appendix 3 to the Addendum to the s42A Report) stated:
- a) Proposed Site 1 would create a navigation safety hazard for vessels relocating marine farms north of the site, without changing the shape of the site to increase the width of the channel to the north of the site;
 - b) Proposed Site 2 would raise no navigation safety concerns for vessels relocating marine farms; and
 - c) Proposed Site 3 would create the most risk for consented users relocating marine farms and was therefore not supported.
163. Ms Appleyard responded to the further information and Addendum to the s42A Report by noting the direct evidence of Mr Swart that the salmon farms must be moved as a single unit and cannot be ‘broken down’ and moved separately. She submitted that Mr MacLennan had overlooked the regular movement of fish via a transport pen, in addition to the relocation of the salmon farm as a unit. She considered it was incorrect to assume there was only ‘one movement every two years’, as stated in the Addendum. She submitted there was no basis to Mr MacLennan’s conclusion that it was ‘unlikely’ that an alternative safe method of navigation could not be found and noted that he appeared to disagree with the Harbourmaster. She considered that if Mr MacLennan had alternative safe procedures or routes for moving five salmon farms, he should articulate these so they can be assessed. She considered the suggestion mussel farms could be moved (either owned by Sanford Limited or third parties) was *‘very concerning and demonstrates a poor understanding of the legal concepts undermining the existing environment’* (para 27, pg.4). She submitted Mr MacLennan should identify which mussel farms should move and demonstrate the costs and practicality of doing so. She noted the evidence of Mr Swart and Mr Eriksson that Sanford cannot control or require the movement of existing mussel farms to allow sufficient space to transport farms or the transporter pens.
164. In his supplementary statement of evidence, Dr Mitchell noted a difference of opinion between Mr Eriksson and the Harbourmaster regarding navigational matters relating to proposed Site 2; and highlighted the conclusions of the Harbourmaster regarding proposed Sites 1 and 3. On this basis he stated he could not conclude that navigational effects would be no more than minor. He also highlighted the evidence of Mr Eriksson and Mr Swart that it is not feasible to move the salmon farm pen by pen.
165. In his final recommendation report, Mr MacLennan accepted Sandford Limited’s evidence that the salmon farm must be moved as a single unit to comply with the following rotation and the conditions of consent. On the basis of the assessment by the Harbourmaster, he concluded that proposed Site 1 and Site 3 would have more than a minor effect on the navigational safety of vessels relocating the

salmon farms. However, he concluded that if the Applicant amended the application to reduce adverse effects on navigation safety his assessment could change. He considered that any reduction in the scope of the application, such as amending proposed Site 1 to enable sufficient space for safe navigation to the north of the site or the removal of proposed Site 3, would be within the scope of the application as notified.

166. The rebuttal evidence of Mr Engel noted that Sanford Limited had not provided evidence as to how it would move the salmon cages as one large unit to comply with conditions 19 and 20 of its resource consent when the application to increase salmon production in the bay was considered by the Council. He noted there had therefore been no opportunity to test the information provided by Sanford Limited regarding alternatives for the relocation of salmon farms that would not require so much space. He considered the introduction of new ways of managing effects required regular movement of salmon cages that had not been designed for regular movement and that the effects of these movements were not been addressed in the variation to the consent. He considered the effect of this 'omission' was now being used to limit any new activity in the bay and to claim a much larger area for navigation through the area than had previously been considered sufficient for vessel movements around the bay.
167. Mr Engel was of the view that in considering navigational safety, most weight should be given to navigation for safe access and that less weight should be applied to providing operational space for Sanford Limited to move its salmon cages. He noted it was clear the Harbourmaster concerns related to vessel navigation when relocating marine farms and that the Applicant agrees with his findings. He highlighted the fact that navigation under the RCP referred to a 'ship' and did not include anything a ship was towing such as the salmon cages. He noted the Reporting Officer had not made this distinction and had effectively accepted Sanford Limited have a right to use and occupy space that can only be provided for by resource consent and a consideration of alternatives. Notwithstanding this view, Mr Engel noted the Applicant was agreeable to amending the application to enable better access to address the concerns of the Harbourmaster by proposing Option 1 and Option 2 for consideration.
168. The rebuttal evidence of Mr Maass-Barrett noted that the perceived 'busyness' of the bay and vessels navigating around the bay had been addressed, and that it was agreed by both the Reporting Officer and the Harbourmaster that any effect would be less than minor. He highlighted Sanford Limited's objection related to relocating the salmon farm in complete blocks of cages to comply with the following plan. He noted the salmon farm would be split in the future and there was no reason it had to be shifted as one unit. He noted the reference to moving mussel lines in the past for the relocation of the salmon farm had involved removing mussel lines on the site where the salmon farm was being moved to and not on another marine farm site to enable the passage of the salmon farm.
169. The rebuttal evidence of Mr Smith noted that, in his experience with salmon farming, there were other methods for moving salmon cages such as pushing cages.

Findings

170. I accept the evidence of Mr Swart and Mr Eriksson that the existing grower farm has to be moved in one piece and that the exercise is complex and requires considerable planning and technical expertise. However, I do not consider the consents held by Sanford Limited specifically provide for or assessed the effects of the need for sufficient navigational space for regular unrestricted movement of the salmon farm as one large unit. I have considered the evidence given that to

breakdown the structure of the existing grower farm and move it would be a difficult and labour intensive operation. I accept that it is operationally easier and safer to move the grower farm cages as one piece and to be able to take the most direct route (with the least changes in direction). However, I do not accept that the existing consents or the requirement to follow salmon growing sites constitute a right to have available (i.e. free of structures) the most direct route between all sites authorised to farm salmon. I agree with Mr Engel that the effects of the need for large navigational channels to be available at all times for moving salmon cages between sites was not assessed as part of the variation to increase production.

171. I acknowledge it is important that existing consent holders have sufficient safe navigational access to their respective sites and to undertake the activities for which they have consent and to move around the bay reasonably unimpeded. I agree that the consideration of safe navigation of vessels between sites and around the bay is different to any consideration of the ability to move the large pieces of marine farming equipment between sites. I agree with the opinion of Mr Doesburg that there is no implied right under the existing consents to navigate between the marine sites to the exclusion of others.
172. On the basis of the further comment from the Harbourmaster, I find the proposed new sites will have a minor effect on the navigation safety of vessels moving in and around the bay; and that there is sufficient space between the existing sites and the proposed sites to ensure vessels can navigate safely. I also accept that conditions can be imposed to ensure appropriate navigation aids are installed and maintained to mark the main navigation channel.
173. On the basis of the evidence of Mr Eriksson, I consider that a channel of at least 200m between marine sites provides for safe navigation vessels and allows sufficient room for safely moving the salmon grower farm in one piece. I have considered the need to minimise changes in direction given the logistics outlined in evidence.
174. Overall, I agree with the Harbourmaster that proposed Site 3 poses the most risk for relocating the salmon farm cages from Site 340 and Site 339 given the lack of sufficient channel width to pull the salmon cage in one piece into the main navigation channel. The question is whether this is merely a matter of inconvenience to the consent holder or whether it would prevent the safe movement of the salmon cages in one piece between sites. I consider the need to change direction more than two or three times to pull the grower farm out into the main navigation channel would be a significant inconvenience and would pose additional safety risks to the operation. I therefore find that proposed Site 3 would significantly impact the current ability of Sanford Limited to safely move the grower salmon farm in one piece from Site 340 into the main navigation channel for relocation to another authorised site. However, I note it appears some of the existing marine farm sites authorised for salmon farming are already effectively 'blocked in' by other existing marine farms and that mussel lines would need to be removed to relocate the salmon farm there in one large piece.
175. Having considered the evidence presented, I accept with the conclusions of the Harbourmaster that proposed Site 1, with a reduction to the northern extent of the site boundary, would ensure the channel to the north of the site provides sufficient width to enable safe navigation between the existing marine farm sites. I also consider this reduction brings the north boundary of proposed Site 1 in line with existing Site 365 and Site 274, creating a consistent channel width between sites. I agree with the Harbourmaster that proposed Site 2 does not pose any safety risks to the safe navigation of vessels moving salmon cages between the existing sites currently authorised to farm salmon. I agree with the Harbourmaster that proposed Site 3 poses the 'most risk' to safe navigation

to relocate salmon cages between the sites currently authorised for salmon farming, and would effectively prevent the relocation of the salmon grower farm from Site 340 into the main navigation channel.

176. On the basis of the evidence, I find that any adverse effects on the navigation safety of vessels moving the salmon grower farm between sites can be avoided by reducing the extent of the north boundary of proposed Site 1 and refusing consent for proposed Site 3. As outlined above, I do not accept it is within the scope of the application to consider a relocated proposed Site 3.

Exercise of existing consents

177. Sanford Limited has raised concern that the application would adversely affect its ability to exercise its existing consents and to comply with the conditions requiring following of the sites used for salmon farming.
178. Mr Swart outlined the operation of the salmon farm, staffing and the servicing of the farms by vessels. He described the regular movement of both the salmon farms and fish in pens around Big Glory Bay. He highlighted the need to move the grower farm as one unit and its large size (approximately 258m long and 66m wide, excluding the barge). He noted the voluntary decision to not put mussels on fallowed salmon sites to understand how the seabed responded, but highlighted mussel growing on these sites in the future was possible under the existing consents.
179. Mr Swart stated that considerable effort goes into coordinating the salmon and mussel farming operations to ensure the programmes do not conflict and that this is not possible with mussel farms owned by others. By way of example, he noted that proposed Site 1 would prevent fish transfer or farm relocation to and from Site 366 and Site 474.
180. Mr Swart stated that moving fish in pens is a highly skilled and specialised process, which takes months of planning and additional staff and vessels. He noted it can take 3-4 days to complete and require additional insurance because of the high risk. He considered the new sites would seriously constrain their current and future operations and render certain sites inoperable.
181. Mr Eriksson's Table 4 outlined the salmon farm locations that would be affected by the proposal. He considered proposed Sites 2 and 3 would make access across the bay from Sites 340 and 339 'very difficult'. He considered the access to Site 320, in front of Sites 366, 474, 322 and 319, would be 'blocked' by proposed Site 1. He considered access to the salmon brood farm on Site 321 would be 'restricted' and to Site 338 would be 'more restricted', particularly in bad weather. He noted Site 366 and Site 474 were shallow close to shore and considered access to the site would be 'extremely difficult' with proposed Site 1 due to being unable to get vessels on the landward side of the consent areas and less clear water; and could add another two hours onto moving time. He considered access to Site 339 would become 'very difficult' in proposed Sites 2 and 3 were in place.
182. Dr Mitchell considered the evidence of Mr Eriksson explained how the proposed sites would block access to Sanford Limited's existing salmon sites and restrict the scheduled intensification of salmon farming over the next five years. He also noted the evidence of Mr Mandeno that the proposed farms would restrict water flow and thereby restrict Sanford Limited's ability to exercise its consents.
183. Dr Mitchell noted that a 'whole of the bay' assessment would be required in 2025 when all the existing marine farm consents in Big Glory Bay expire and new applications will need to be made. He

considered the applications for replacement consents would be frustrated by the proposal, as the proposal would form part of the existing environment when the currently authorised activities were re-assessed. He considered this would be inequitable and contrary to good resource management practice.

184. The Addendum to the s42A Report included legal advice from Mr Doesburg in relation to Sanford Limited's existing occupation rights. The advice considered the conditions of the existing consents and in particular the requirement to undertake rotation and fallowing of the salmon sites. It noted the consents did not specify a path to use when moving the salmon operations. It noted section 122 of the RMA provided that coastal permits are not real or personal property and that there are two ways a coastal permit may give rights of exclusion of other from use and occupancy¹⁴. It stated the first was where the resource consent expressly provided for such rights of exclusion; and the second was when exclusion of others or a degree of exclusion was reasonably necessary to achieve the purpose of the permit. It considered Sanford Limited's occupation rights were limited to the areas contained within the site maps attached to each consent and were defined as not authorising exclusive occupation, albeit recognising that marine farming structures and operations would result in some level of exclusion over part of the site to extent it was necessary. It legal advice concluded that no further occupation rights should be implied beyond the face of the consent and therefore there was no implied occupation rights to navigate between the sites to the exclusion of others.
185. The legal advice of Mr Doesburg also considered whether the navigation effects raised by Sanford Limited could amount to a derogation from their existing consents if the application was to be granted. He referred to the Court of Appeal's 2015 decision in *Hampton v Canterbury Regional Council*¹⁵, which cast doubt as to whether a consent that is not a property right can be derogated from. On this basis, he concluded the principle of derogation was unlikely to be a relevant issue, but noted that the effects on navigation were relevant effects to be taken into account under section 104. However, in the event that the principle of derogation was applicable, he noted the threshold to establish this was 'high' and would need to frustrate the existing grant or at least be found to be substantial interference.
186. In response to the further information and Addendum to the s42A Report, Ms Appleyard submitted that Sanford Limited had not raised issues of occupation rights and derogation and that she was unsure why legal advice from Mr Doesburg had been sought. She stated that Sanford did not claim to have the right to navigate freely between its marine far sites to the exclusion of all others. She submitted its concerns related to the ability to exercise the existing consents in accordance with the conditions imposed.
187. In rebuttal Mr Maass-Barrett noted that the concerns outlined by Mr Eriksson, in relation to proposed Site 1, were related to the fact existing Site 149, Site 366 and Site 474 were located close to shore and close together, and that access was obstructed by warp ropes. He considered these factors made the sites unsuitable for locating the salmon grower farm, regardless of the location of the proposed site.
188. In rebuttal evidence, Mr Engel considered that the principle of derogation would only apply if Sanford Limited was frustrated in its ability to comply with its conditions of consent. He noted Sanford

¹⁴ Section 122(5) of the RMA.

¹⁵ NZCA 509

Limited had no occupation rights, actual or implied, beyond the existing authorised marine farm sites.

189. The submission from EEC Limited noted that in 1994 they had made an application for their existing five marine farm sites and a further Site 'R' – reserve site, near proposed Site 1. EEC Limited stated it sought justification as to why the site would be available now. EEC Limited stated it considered it had prior rights to Site 'R' and that that should be acknowledged.
190. The s42A Report considered the EEC Limited submission and noted any application in 1994 would have been under a different planning regime. It concluded that any decision to decline consent for an area similar to proposed Site 1 was 25 years ago and had little relevance to the current application, which must be considered on its merits.

Findings

191. The evidence shows that of the 35 existing marine farm sites in Big Glory Bay, Sanford Limited holds consents for 21 of the sites and jointly operates a further three sites (Sites 366, 474 and 342). I consider this demonstrates that Sanford Limited have a high level of operational control in the bay. It is apparent that access to some of the existing sites such as Sites 342, 247, 317, 325, 315, 321, 324 and 418 is already limited or somewhat restricted by the other existing sites. However, direct access to all of these sites could be provided by way of other sites held by Sanford Limited (Site 246, 338, 244, 249 and 320). I do not consider that access to any existing marine site is currently restricted by another site held by another party. I also note that there are 11 existing marine farm sites held by four other consent holders and that all of these sites have relatively unrestricted access to the main navigation channel.
192. I note that salmon or mussel farming is authorised on seven of Sanford Limited's sites (Sites 246, 249, 320, 321, 338, 339 and 340); and three jointly operated sites (Sites 366, 474 and 342). I note the 'Fallowing and Rotation Plan' (dated 21 January 2016) states that Sites 320 and 321 are not suitable for salmon farming at this time; and that a variation would be required to salmon farm on Site 475. However, despite this, the fallowing and rotation plan states under 'The Order of Occupancy' that the grower farm will be located on Site 475 in 2020 and 2012. I note the conditions of Coastal Permit 203244 for Site 475 do currently not authorise this site for farming salmon. I have therefore limited my assessment to the movement of salmon cages between the 10 sites currently authorised for farming salmon or mussels. I consider the Council should seek clarification from Sanford Limited outside of this process to correct the documented Order of Occupancy to exclude any site not authorised for salmon farming.
193. I acknowledge the evidence provided by Sanford Limited as to how a salmon farm and transporter pen are moved, and the space necessary to ensure this can be done safely in the event of inclement weather or equipment failure.
194. I do not consider proposed Sites 1 (as reduced) and Site 2 would have more than a minor effect on Sanford Limited's ability to move the salmon grower farm or transporter cages between the sites authorised to farm salmon, nor would they frustrate Sanford Limited's ability to comply with the consent requirements to rotate and fallow sites used for salmon operations. While there may be some level of inconvenience in needing to take an alternative route or an additional turn, I do not accept these proposed sites would preclude shifting the salmon grower farm or salmon pens

between sites. However, I agree that proposed Site 3 would be directly in front of Sites 340 and 339 and would restrict direct access to the main navigation channel.

195. I do not consider proposed Site 1 would block access to Sanford Limited's Sites 320, 366 or 474, so long as the existing width of the channel between Site 274 and 322 is maintained. I consider maintaining the existing access width provides more than sufficient space for manoeuvring the salmon cages as one large unit. I also consider the existing access to Site 319 (Schofield) and Site 322 (Gorton) is also maintained.
196. I have considered the concerns raised by EEC Limited with regard to any right of priority to proposed Site 1. I accept that this site is located in a similar place to Site 'R' on the plan provided by EEC Limited. I accept this was considered to be a reserve site in the event one of its existing five marine farm sites proved to be unsuitable. However, it appears that some 25 years later, EEC Limited are continuing to operate the consented five marine farm sites and it is clear these have proven to be suitable. I do not consider there is any evidence that this Site 'R' is authorised under the existing consents or that EEC Limited have any right of priority to the site.

SECTION 104(1)(ab) – POSITIVE EFFECTS TO OFFSET OR COMPENSATE FOR ADVERSE EFFECTS

197. No offsets or compensation was proposed by the Applicant for my consideration.

SECTION 104(1)(b) - RELEVANT PLANNING PROVISIONS

198. An analysis of the relevant provisions of the NZCPS, RPS and RCP was provided in the s42A Report.
199. The s42A Report concluded that the application is generally consistent with the relevant objectives and policies of the NZCPS, RPS and RCP.
200. Mr Engel adopted the conclusions of the s42A Report and note two additional parts of the RCP that were not included relating to occupation and the introduction of exotic fauna not indigenous to Stewart Island. He noted that exclusive occupation was not sought, but acknowledged there was an effect of excluding other activities during harvest. He considered that if occupation was not included under Rule 15.1.7 for 'marine farming', only Rules 9.1.1 or 9.1.2(1) could apply. He noted that existing farms were required to get their mussel spat from Ninety Mile Beach because it was considered low risk for introducing unwanted organisms. He noted this activity triggered Rule 5.4.3.2 and the non-complying status, which would apply to all existing marine farms. He concluded any impact had already occurred and noted that greenshell mussels were growing wild in the bay.
201. Dr Mitchell considered the s42A Report analysis of the NZCPS and RPS was incomplete. He noted the important caveats of NZCPS Policies 6 and 8 that state that aquaculture is not appropriate in all circumstances and that site-specific assessments are required. He highlighted that aquaculture must be undertaken in 'appropriate places' and within 'appropriate limits. He considered the proposed locations were not deemed appropriate just by virtue of locating in Big Glory Bay, and that the proposed sites must be assessed on a case by case basis. He concluded the Applicant had not provided sufficient evidence to demonstrate the proposed sites would be located in appropriate places or within appropriate limits to avoid cumulative effects on navigational safety and ecological carrying capacity.
202. Dr Mitchell considered NZCPS Policy 3 was directly relevant and required a precautionary approach to be adopted in respect of effects on hydrodynamics and carrying capacity given his conclusion that

these are both 'uncertain' and 'potentially significantly adverse'. He noted that no adaptive management measure or any other precautionary approach had been proposed by the Applicant and therefore the application should be declined.

203. Dr Mitchell highlighted RPS Objectives Coast.2 and Coast.5, and Policies Bio.3, Coast.3, Coast.4 and Coast.5. He concluded the proposal did not avoid, remedy or mitigate adverse effects on navigation; and no information had been provided to confirm cumulative effects of hydrodynamics and ecological carrying capacity would be avoided, remedied or mitigated. He stated he could not conclude the proposal aligns with the relevant objectives and policies or that it is 'appropriate aquaculture'.
204. Dr Mitchell noted that RCP Objective 4.7.1,4.7.2, 5.3.6, 5.8.1, 11.2.1, 11.8.2, 12.1.2 and 15.1.1; and Policies 4.6.1,4.7.2, 5.3.12, 5.8.1, 11.2.1, 11.8.2, 12.1.5 and 15.1.1, were directly relevant and were not addressed by Mr Engel or in the s42A Report. He concluded that because the proposal does not avoid, remedy or mitigate adverse effects and provide sufficient information, it is clearly contrary to these provisions.
205. In his Addendum, Mr Maclennan responded to the evidence of Dr Mitchell and noted that the further evidence on the cumulative effects on hydrodynamics and ecological carrying capacity demonstrated the application would be consistent with NZCPS Objective 6, and Policies 6 and 8. On the basis of the NIWA Report, he considered the effects of the application were known and were assessed to be minor. He therefore disagreed with Dr Mitchell's view that a precautionary approach was required (NZCPS Policy 3) and noted Dr Mitchell has not had the benefit of the further assessment. He disagreed with Dr Mitchell that the application was inconsistent with the direction of the RPS and again acknowledged he would have the opportunity to update his assessment on the basis of the NIWA Report. In relation to the RCP, he concluded the application would be consistent with the objectives and policies that require safe navigation and the avoidance, remedy and mitigation of cumulative effects on hydrodynamic processes and ecological carrying capacity.
206. In his supplementary statement of evidence, Dr Mitchell stated he remained of the view the proposal was at odds with a number of key planning provisions and would result in an outcome that was not supported by the statutory planning documents. He also remained of the opinion that a precautionary approach under NZCPS Policy 3 was required and that no such approach had been proposed by the Applicant.
207. In his final report, Mr Maclennan maintained his view that based on the updated NIWA Report any potential adverse effects on hydrodynamics and ecological carrying capacity would be minor, and that a precautionary approach is not necessary under NZCPS Policy 3. He noted the difference in opinion between Mr Eriksson and the Harbourmaster in relation to the magnitude of effect on navigation safety risk posed to vessels relocating salmon cages by proposed Site 1 and Site 2, but considered a precautionary approach would only be required for 'significant' adverse effects.
208. In relation to the RPS, Mr Maclennan concluded the application was consistent with the direction provided for managing adverse effects on the ecological carrying capacity of the bay. He agreed with Dr Mitchell, that the without amendment, proposed Site 1 and Site 3 would be inconsistent with the provisions requiring adverse effects on navigation safety to be avoided, remedied or mitigated. He made similar conclusions in relation to the RCP on the same basis.
209. In rebuttal evidence, Mr Engel noted the agreement between himself and Mr Maclennan, with the except of navigation effects. He remained of the view that either Option 1 or Option 2 would be consistent with the requirement to avoid adverse effects on navigation safety.

Findings

210. I have considered all the relevant provisions of the NZCPS, RPS and RCP. I note that the RPS and RCP have been reviewed and updated to give effect to the NZCPS 2010. I accept that the NZCPS gives effect to the provisions of the RMA in relation to the coastal environment.
211. I find that by amending proposed Site 1 to reduce the extent of the north boundary and refusing consent for proposed Site 3, any adverse effects on navigation safety will be avoided; and that overall these amendments make the application almost entirely consistent with the relevant provisions of the NZCPS, RPS and RCP that seek to enable marine farming in appropriate forms and locations, while avoiding and mitigating adverse effects on the environment. On the basis of the evidence before me, I consider the level of uncertainty regarding potential adverse environmental effects does not warrant a precautionary approach in accordance with NZCPS Policy 3.

SECTION 104(1)(c) - OTHER MATTERS

212. There was agreement that Te Tangi a Tauria – the Natural Resources and Environmental Iwi Management Plan for Ngāi Tahu ki Murihiku ('Iwi Management Plan') was a relevant consideration under section 104(1)(c). However, Dr Mitchell considered it did not speak directly to the key issues, except to advocate that a precautionary approach should be taken in considering the effects on hydrodynamics and carrying capacity.

Findings

213. Overall, I find the application is consistent with the outcomes sought by the provisions of the IMP.

SECTION 104D

214. The s42A Report and Addendum concluded that the application passed both gateway tests of section 104D, in that the environmental effects would be no more than minor and the activities were consistent with the relevant statutory plans.
215. Mr Engel concluded that the proposal would pass both gateway tests of section 104D and therefore the consent could be granted.
216. Dr Mitchell concluded that the proposal failed both gateway tests of section 104D and therefore cannot be granted consent.
217. In his Addendum, Mr MacLennan maintained the view that the application would pass both gateway tests and that the grant of consent was not therefore precluded.
218. In his supplementary statement of evidence, Dr Mitchell stated that his conclusions remained unchanged and that that the proposal failed to pass either gateway test of section 104D and therefore could not be granted consent.
219. Ms Appleyard submitted that on the basis of the further statements of evidence from Dr Hartstein and Dr Mitchell, neither gateway test of section 104D had been satisfied and that consent can therefore not be granted.
220. In his final recommendation report, Mr MacLennan concluded that without amendment to proposed Site 1 and removal of proposed Site 3, the application would fail section 104D(1)(a) on the basis that potential adverse effects on navigation safety of vessels moving salmon cages would be more than

minor. He concluded that the application would also fail section 104D(1)(b) because it would be 'inconsistent' with the directive of RCP Policy 11.8.2.

221. In rebuttal, Mr Engel highlighted that Dr Mitchell had applied the wrong test under section 104D(1)(b) by concluding the application was 'inconsistent' with the relevant objectives and policies. He noted the requirement was that the application must be 'contrary' to the relevant provisions and that this was a much higher bar. He noted his own assessment and that of Mr MacLennan concluded that at worst the application was 'inconsistent' with some provisions. He concluded that the environmental effects of either Option 1 or Option 2 would be no more than minor and that therefore both gateway tests in section 104D were passed and consent could be granted.

Findings

222. On the basis of my assessment of the potential environmental effects of the proposed activities, I find the application for a reduced proposed Site 1 and proposed Site 2, passes section 104D(1)(a). In considering the relevant objectives and policies of the NZCPS, RPS and RCP, I find the application for a reduced proposed Site 1 and proposed Site 2, is not contrary these provisions and therefore section 104D(1)(b) is also passed. I therefore find there is therefore no restriction on granting consent for two of the proposed sites, as outlined.

SECTION 105 AND 107

223. The Applicant stated that the discharge associated with harvesting would result in a small plume of discoloured water extending several metres. They stated that no component of the discharge was toxic to the marine environment and that the effects would be localised and of short duration. They considered the sensitivity of the receiving environment to be low and any potential impact on water quality and the benthos to be low. They noted the monitoring undertaken showed shellfish farming effects were nor more than minor and were not irreversible.
224. The s4A Report agreed that the annual monitoring reports indicated that mussel farming in Big Glory Bay had not caused any significant changes to water quality or the marine benthos outside the marine farm site boundaries.
225. The s42A Report set out section 107 and stated that the discharges were unlikely to result in any of the effects set out in section 107(1)(c)-(g).
226. The s42A Report also addressed alternative methods of discharge, including discharge into any other receiving environment. It concluded the discharge method proposed and the receiving environment were the best option available, if not the only option given the relatively exposed and remote location.

Findings

227. I have had regard to the nature of the discharge and the sensitivity of the receiving environment to adverse effects. I note that the water quality classification under the RCP is 'People & Aquatic Life' and that visual clarity must not be diminished by more than 20 percent beyond reasonable mixing.
228. While it was acknowledged that the proposed activities include discharges of seawater used for washing, shell debris and mussel faeces, there was very little focus on the effects of the discharge in evidence. The Applicant stated they relied on the results of the wider water quality monitoring for Big Glory Bay undertaken over the many years and the findings of numerous studies into effects on water quality and benthic ecology; and that these are shown to be minor and localised.

229. I accept that discharges to coastal waters associated with marine farming mussels in New Zealand waters are reasonably well studied and understood, and are likely to be localised and of minor effect on water quality and benthic ecology at this location. Overall, I am satisfied any impacts on water quality and benthic ecology are likely to be minor outside the marine farm site boundaries. On the basis of the evidence presented, I find that section 107(1)(c), (d), (e) and (g) are unlikely to be breached by the discharges. Therefore, I find there is no restriction on the grant of consent.

PART 2 OF THE ACT

230. I accept that based on the recent Court of Appeal's *RJ Davidson v Marlborough District Council*¹⁶ ('Davidson decision'), recourse to Part 2 may be of assistance in trying to assess consistency with objectives and policies where there is conflict or tension between the policies or they pull in different directions. However, recourse to Part 2 should not render the relevant planning documents ineffective if they give effect to Part 2.
231. I consider the relevant objectives and policies of the NZCPS, RPS and RCP have been developed and implemented to give effect to these provisions. I have found that the application is consistent with the relevant objectives and policies of these statutory document.
232. I do not consider that reference to Part 2 would add anything to the evaluative assessment I have undertaken under section 104 of the Act.

Overall Conclusion

233. On the basis of the evidence before me, I conclude that the environmental effects of the application will generally be no more than minor with the imposition of appropriate consent conditions. I have paid particular attention to actual and potential effects on navigational safety, ecological carrying capacity of Big Glory Bay and the exercise of other existing consents. Overall, I find that scale, form and location of the proposed sites, as amended by this decision, will avoid adverse effects on navigation safety.
234. I consider the provisions of the NZCPS and RCP provide clear guidance on appropriate use and development of the CMA in relation to coastal processes, ecological values, water quality, cultural and heritage values, recreational values, navigational safety, natural character values and landscape values. From this wider perspective and guidance, I find the proposed activities are appropriate at this scale, form and location.
235. Overall, I conclude that the application is consistent with the promotion of sustainable management of natural and physical resource, as define on section 5 of the RMA, and the consent should therefore be granted.

Conditions

236. I have considered the final set of consent conditions recommended in final recommendation of the Reporting Officer. In general, find these to be appropriate, practicable and enforceable. I have made a number of small changes for clarity and consistency of terminology.
237. I have considered the historical practise of 'allowing' mooring blocks and anchors, and attached warps/ropes associated with existing marine farming activity to be outside the defined marine farm site, as a pragmatic solution to a bay-wide historic problem. I understand this has occurred because

¹⁶ [2018] NZCA 316

the existing marine farm sites have historically been defined by the extent of visible surface structures and that not all sub-surface structures such as the warp ropes and anchors are currently located within the identified marine farm site boundaries. However, I am of the firm view that all marine farming structures (except transient and temporary structures such as working barges) must be located within the boundaries of the consented marine farm area and authorised as part of the marine farm operation. I consider all consent activities, including harvesting discharges/deposition and all associated anchoring structures, should be occur within the defined marine farm boundaries. I acknowledge this will require boundary extensions to the proposed marine sites at each end of the site (at the end of the mussel lines). It also required calculation of an overall maximum marine farm site size reflecting the extent of all sub-surface structures and a maximum size of the extent of surface structures. However, importantly, this redefinition of the overall marine site does not change the assessment of effects given the extent and number of mussel lines remains unchanged and existing marine farmers are aware that historically sub-surface structures have been located outside the marine farm boundaries.

238. I note 'Image 2' of the Addendum to the s42A Report shows the implications of implementing such an approach on the existing marine farms. It indicates that redefining the boundaries of the existing sites to ensure all existing structures associated with marine farming activity are within the consented areas would result in some of the existing marine farm areas overlapping and small, if not non-existent, gaps between some of the sites. This and matters relating to occupation and sufficient navigation access will need to be addressed in any applications for new replacement consents in 2025.
239. I have included an additional condition requiring the Applicant to provide an updated site plan (to be appended to the consent) to be provided within one month of the commencement of the consent, which reflects the outcome of this decision (i.e. the grant of consent for a reduced proposed Site 1 and proposed Site 2). The condition requires that updated site plan must show the site boundaries of the total extent of the marine farm site (including all structures), in addition to site boundaries showing the extent of surface structures. This must reflect a maximum extent of surface structures of 4 ha for proposed Site 1 (reflecting the reduction to the north site boundary) and 5 ha for proposed Site 2 (as notified).

Duration

240. The Applicant sought a consent expiry date of 1 January 2040, on the basis the other existing marine farms would be granted a further 15 year consent term on the replacement of the existing consents in 2025.
241. The s42A Report recommended a 20 year consent duration on the basis of considering guidance from section 123A of the Act and the Te Tangi a Tauria IMP.
242. In his final report, Mr MacLennan provided a Memorandum from Mr Doesburg in relation to section 123A. Mr Doesburg was of the opinion that section 123A(2)(b) reinforced a high threshold to be met in order to impose a shorter duration than 20 years. He considered this would require evidence that the application would have an adverse effect and that a shorter duration would be necessary to ensure the adverse effects were managed. On the basis of this legal opinion, Mr MacLennan concluded that if effects on navigation safety were avoided by amendment to the application, a shorter consent duration was not necessary to manage adverse effects.

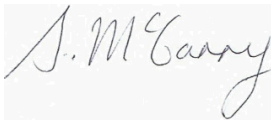
Findings

243. Overall, I find that a 20 year consent term, as sought, is appropriate given the 10 year life of the statutory plans, the level of capital investment required to establish the farm, and the temporary and removable nature of the structures. I consider there are no adverse environmental effects to be managed that would justify a shorter duration under section 123A.

DECISION

244. It is the decision of the Southland Regional Council, pursuant to sections 104 104D, 105 and 107, and subject to Part 2 of the Resource Management Act 1991, to GRANT, in part, Coastal Permit APP20181316 to place and fix structures to the seabed and occupy the coastal marine area, disturb the seabed, and deposit marine debris (shell and organic matter) and to discharge contaminants associated with marine farming into the coastal marine area at Big Glory Bay, Stewart Island; subject to the conditions set out in Attachment 1 of this decision and as shown on the amended site plan in Appendix 1 of the conditions of consent.

Dated at Christchurch this 27th day of November 2019



Sharon McGarry
Independent Hearing Commissioner