

Our Reference: A945924

Consent No. RM16.179.01

COASTAL PERMIT

Pursuant to Section 104B of the Resource Management Act 1991, the Otago Regional Council grants consent to:

Name: Port Otago Limited

Address: 15 Beach Street, Port Chalmers, Dunedin

To discharge dredging spoil into the Pacific Ocean,

in accordance with;

the disposal of dredged material from the channel and berth areas in or about Otago Harbour at the three disposal sites described below.

For a term expiring 7 June 2042

Location of Consent Activity: Pacific Ocean adjacent to Heyward Point, Aramoana and Shelly Beach

Map References (NZTM 2000):

(i) Heyward Point
E1420309 N4931834
E1421276 N4930679
E1422429 N4931657
E1421462 N4932797

(ii) Aramoana
E1421464 N4929554
E1422088 N4929053
E1422376 N4929414
E1421739 N4929914

(iii) Shelly Beach
E1422239 N4928298
E1421925 N4927955
E1422203 N4927759
E1422465 N4928119

Legal description of consent location: Common Marine and Coastal Area

Conditions

Specific

1. The following specific maximum annual discharge quantities for disposal of dredging spoil shall apply:
 - (i) No more than 450,000 cubic metres in total shall be disposed of on an annual basis across the three sites.
 - (ii) The total volume deposited across the Heyward Point and Aramoana disposal grounds shall not exceed an average of 300,000 cubic metres / year, calculated over any 5-year period.
 - (iii) Notwithstanding (ii) above, the total volume deposited at Aramoana should not exceed an average of 100,000 cubic metres/ year, calculated over any 5-year period.
 - (iv) No more than 50,000 cubic metres shall be disposed of on an annual basis at Shelly Beach.

Advice Note – it is the intention of Conditions (ii) and (iii) that the normal annual deposition will be up to 100,000m³ at Aramoana and up to 200,000m³ at Heyward Point.

2. Material discharged shall only be derived from dredging that is authorised by the Regional Plan: Coast for Otago or by a resource consent, and that is sourced from the Otago Harbour and its entrance.
3. Disposal of sand, silt and rock within the Heyward Point disposal ground must be deposited in accordance with the specified cells for each material type on Figure 1 attached to this consent.

For the purposes of this consent:

- “silt” means solid material that is less than 63 microns in size
 - “sand” means solid material that is more than 63 microns and less than 2 millimetres in size, apart from natural background material such as shells
 - “silt load” means that solid fraction of any individual hopper load that contains less than 65% of sand material
 - “sand load” means the solid fraction of any individual hopper load that contains more than 90% of sand sized material.
4. Only sand material shall be deposited within the Aramoana site.

5. Prior to using any dredge with a hopper capacity of greater than 2000 cubic metres for disposal activities, the consent holder shall confirm the dredge's passive plume and deposition footprint and seek advice from a suitably qualified ecologist(s) to determine if any additional monitoring is required to detect ecological effects on kelp forests and associated algal communities and invertebrates. The information on the passive plume, deposition footprint and the ecologist's advice shall be provided to the Consent Authority for certification that the effects of the alternative dredge plume and deposition are no greater than the effects authorised. This certification is required prior to the use of any alternative dredge.
6. Material discharged at the Shelly Beach site shall not be derived from any further westward of Longitude 170° 39' 50" (being in the vicinity of Otago Harbour beacons 15 & 16A between Pulling Point and Tayler Point), and, as far as practicable, be only discharged on an ebb tide. No rock material is to be disposed of at the Shelly Beach site.

Dredging Volumes and Bathymetric Monitoring

7. (i) The consent holder shall record the following information in relation to the disposal of material at each of the three disposal sites.
 - (a) the volume of dredge material in each disposal event;
 - (b) the volume and percentage of each material type in each event;
 - (c) the source geographic claim location information;
 - (d) the GPS location (WGS84 format) of the event;
 - (e) the date and time of disposal; and
 - (f) a cumulative total of the volumes of disposal (including material type) from the commencement of the consent.
- (ii) The records shall be kept and submitted to the Consent Authority on an annual basis, no later than the anniversary of the date of the commencement of this permit in report format, including digital records that allow for GIS plotting.
8. As a minimum, the consent holder shall undertake annual bathymetric surveys of the seabed at each of the disposal site locations and the beach areas inshore of these which have the potential to be affected by the disposal. All bathymetric surveys shall have an accuracy of 0.25 metres vertically. The extent and frequency of bathymetric surveys may be amended with the agreement of the Dredging Working Party and the Consent Authority.
 - A. Bathymetric surveys shall be undertaken for the Shelly Beach site that clearly indicates the degree of change to the seabed in the surveyed areas.

- B. Bathymetric surveys shall be undertaken for the Heyward Point disposal site to check the dimensions and depths of the mound and spur features are within the following limits:
- (i) The mound within cells PB5,6,7, PD5,6,7, and PC5,6,7 is maintained in its present location and is not less than 9.5 metres below mean sea level;
 - (ii) The 12 metre depth contour surrounding the mound is greater than 300 metres in diameter;
 - (iii) That minimal disposal occurs on the spur area within cells PC1,2,3,4 and PD1,2,3,4 illustrated on Figure 1 as attached as Appendix 1 to this consent; and
 - (iv) That the balance of material is spread out evenly.

Advice Note - The limits have been specified to ensure that the mound is managed in a manner that avoids it becoming too high above natural seabed level, or the sides of the mound becoming too steep. This is required to avoid the creation of wave interference patterns and wave crest disruptions at the Whareakeake surf break.

- C. Bathymetric surveys shall be undertaken for the Aramoana disposal site to check the positions of the 5, 6 and 7 metre depth contours are consistent with the historical positions illustrated on Figure 2, Figure 3 and Figure 4 as attached as Appendix 1 to this consent.

Where there is a departure from the specified contour levels at the Heyward Point or Aramoana disposal sites, a review of the bathymetric surveys shall be undertaken by a suitably qualified expert in coastal processes to identify the potential for adverse effects on wave and sediment transport, and the adaptive management process outlined in Condition 18 shall be commenced.

9. A visual or photographic record of surf conditions shall be maintained and archived for the Aramoana and Whareakeake surf breaks. This shall be made available and reviewed as necessary by the Dredging Working Party, in the event that the adaptive management Condition 18 is triggered and the Dredging Working Party identifies a potential surf quality issue. These data are to be recorded through webcams or alternative technology as agreed with the Dredging Working Party. Visual recording may be discontinued in the future, with the agreement of the Working Party and the Consent Authority.

10. Beach profile surveys for the Aramoana, Kaikai, Whareakeake, Long Beach, Pūrānkaunui, Warrington Spit, Karitane and Shelly Beach shall be undertaken annually by a suitably qualified expert in coastal processes for the first five years from the date of the commencement of this permit and thereafter once every five years for the term of this consent. A beach monitoring report shall be provided to the consent authority following each profile survey with an assessment of the rate and extent of sediment accumulation at the beaches in Blueskin Bay and the effect of disposal activities on erosion or accretion of the beach. Where this report identifies any adverse effects potentially attributable to disposal activities, the adaptive management process outlined in Condition 18 shall be commenced.
11. The consent holder is to take all reasonable efforts to avoid harm to marine mammals, feeding birds or schooling fish during dredging operations. This includes the following measures:
- a. A competent observer will be on board the dredge, and will watch for any marine mammal, feeding birds or schooling fish within 300 metres of dredging equipment. A competent observer is part of the normal crew who has been briefed and trained with respect to avoidance of marine mammals and sightings of endangered species.
 - b. In the event that feeding birds or schooling fish are sighted, the dredge will avoid those feeding birds and schooling fish as far as practicable, whilst not compromising the safety of vessels or personnel.
 - c. In the event a marine mammal is sighted, whilst not compromising the safety of vessels or personnel, the following actions will be taken:
 - i. The dredge will avoid the mammal as far as practicable;
 - ii. The dredge will avoid approaching the marine mammal head on;
 - iii. The dredge will maintain a constant speed when within 300 metres of the mammal;
 - iv. The dredge will avoid sudden changes in direction;
 - v. The sighting, and any management actions undertaken will be recorded, and reported to the Department of Conservation and the Consent Authority. The report shall be submitted to the Consent Authority on an annual basis, no later than the anniversary of the date of the commencement of this permit.

Benthic Monitoring

12. (i) Benthic monitoring shall be carried out for the Heyward Point and Aramoana disposal sites in accordance the report entitled “Port Otago inshore dredging disposal programme – recommendations for long-term ecological monitoring” prepared by NIWA, dated October 2016.
- (ii) Monitoring is to be carried out at Heyward Point in the first, third, fifth and seventh years from the date of the commencement of this permit.
- (iii) Monitoring is to be carried out at Aramoana in the first, third and seventh years from the date of commencement of this permit.

13. (i) A report summarising the results of the benthic monitoring required by Condition 12 shall be prepared by suitably qualified ecologist(s) and submitted to the Consent Authority within three months of sampling. The report must analyse each new set of results, report on differences between impact and control sites, discuss any trends between successive surveys and review overall ecological effects. The report should also review the suitability of the 0.2 significance level (1 in 5 chance that two values differ by chance alone) as a trigger for the adaptive management process and advise on any necessary adjustments for future monitoring.
- (ii) Where the threshold for adaptive management is triggered, the adaptive management process outlined in Condition 18 shall be commenced.

Rocky Reef Monitoring and Reporting

14. (i) Within 3 months of the commencement of this consent, the consent holder shall prepare a draft plan for monitoring rocky reef habitats within the vicinity of the disposal sites prepared by a person or organisation recognised by the Consent Authority as having the requisite qualifications and experience for undertaking ecological monitoring. The monitoring plan shall provide recommendations on rocky reef indicator species, confirm the timing and methodology for establishing baseline information on rocky habitat health along with recommendations for any ongoing monitoring to manage effects of dredging disposal.
- (ii) Following preparation, the consent holder shall consult with the Dredging Working Party and the Manawhenua Consultative Group on the draft rocky reef monitoring plan, following which the plan shall be finalised having regard to any comments received, prior to submitting it to the Consent Authority for its approval. The Consent Authority shall approve the monitoring plan, prior to rocky reef monitoring commencing.
15. (i) Monitoring, in accordance with the plan approved by the Consent Authority under Condition 14 shall be undertaken in accordance with the rocky reef monitoring plan for a period of not less than seven years from commencement of this consent.
- (ii) Report(s) summarising the results of the monitoring shall be prepared by suitably qualified ecologist(s) and submitted to the Consent Authority within three months of sampling. The reports must analyse each new set of results, report on differences between successive samplings undertaken, discuss any trends and review overall ecological health for the indicator species and the study areas overall. The report should consider whether there are any factors affecting ecological health of the species and in particular comment if any potential effects attributable to dredging disposal activities are present – where this is identified, the adaptive management process outlined in Condition 18 shall be commenced. The report should also advise on any necessary adjustments for future monitoring.

Reviews of Monitoring and Adaptive Management

- 16 The Consent Holder shall commission the authors of the 7th year benthic and rocky reef monitoring work to jointly review the need for any future monitoring and, if so, the design, frequency, adaptive management triggers and the date of any future review for the benthic and rocky reef monitoring programmes, Following receipt of this report, the consent holder shall consult with the Dredging Working Party and the Manawhenua Consultative Group on the monitoring review, following which the review shall be finalised having regard to any comments received, prior to submitting it to the Consent Authority for its approval. Upon approval being given, future monitoring shall be in accordance with the terms of the review.
- 17 Notwithstanding Condition 16 the consent holder shall as a minimum undertake benthic monitoring consistent with Condition 12 of this consent at each of the Heyward Point and Aramoana disposal sites on at least three other occasions during the term of this consent.
- 18 (i) If required by Conditions 8B, 8C, 10, 13 or 15 the consent holder shall commence the adaptive management process. This will include, but not be limited to, convening the Dredging Working Party and the MCG to evaluate monitoring results. The Dredging Working Party and MCG should evaluate all available monitoring results and information and agree actions to remedy any observed effects that fall outside the objectives listed below:
- (a) That beaches within Blueskin Bay have an adequate supply of sand such that long term erosion or accretion of the beaches are not adversely affected by disposal activity;
 - (b) That disposal activity does not adversely affect surfing amenity at the Aramoana Spit and Whareakeake surf breaks; and
 - (c) Ecological effects on functioning and diversity of ecosystems beyond the disposal ground boundaries are avoided.
 - (d). Benthic communities persist within the disposal grounds and show signs of continual recovery from dredged sediment deposition
- (ii) Once actions are agreed by the Dredging Working Party and the MCG, the consent holder will implement those actions and, if appropriate, initiate any agreed supplementary monitoring regime to evaluate the consequences of the remedial action. Details of any adaptive management carried out shall be included in the annual report submitted to the Consent Authority.

Working Parties

19. The consent holder shall continue to work with the existing Dredging Working Party which includes representatives of Port Otago Limited, Te Runanga Otakou, Kati Huirapa Runanga ki Puketeraki, Surfbreak Protection Society, South Coast Board Riders Association, Department of Conservation and Otago Regional Council. The consent holder shall invite the Aramoana (Otago) Conservation Charitable Trust to nominate a local representative to join the Dredging Working Party. For the purpose of this consent the Dredging Working Party shall have the following terms of reference:
- a) A meeting shall be called by the consent holder with no less than 30 working days' notice and at least annually to discuss and review the annual monitoring report, and other reports required by this permit.
 - b) All reports to be reviewed by the Dredging Working Party shall be circulated no less than 20 working days prior to the scheduled meeting.
 - c) Evaluate information and make recommendations to the consent holder and/or the Consent Authority when the adaptive management process is initiated in accordance with Condition 18. Additional members or advisors may be co-opted to ensure the Dredging Working Party has the requisite skills to be able to deliver on its terms of reference. Any co-option requires the unanimous agreement of members of the Dredging Working Party.
20. In the event of any dispute, disagreement or inaction arising between the consent holder and the Dredging Working Party on adaptive management actions or monitoring required by Condition 18, the matter shall be referred in the first instance to the Consent Authority to determine a process for resolution of the dispute, disagreement or inaction. If a resolution cannot be agreed within 10 working days of requesting Consent Authority's assistance, the matter may be referred to an independent mediator to assist the parties to reach agreement. Alternatively, the Consent Authority may serve notice of review under Condition 26.
21. The consent holder shall work with representatives of the local hapū, iwi and the East Otago Taiāpure Committee as part of the "Manawhenua Consultation Group" (MCG) established under Project Next Generation consents 2010.193 - 2010.200 and 2010.202 – 2010.203.
- (i) The purpose of the MCG shall be to facilitate consultation between Manawhenua and Port Otago Ltd on capital and maintenance dredging and disposal activities.
 - (ii) The MCG shall have the following functions:
 - (a) To facilitate consultation on the design and implementation of the cultural monitoring programme, including the development of cultural health indicators for key species of importance to Kāi Tahu;

- (b) To receive and review the monitoring data and reports from the cultural, physical and biological monitoring undertaken as part of Project Next Generation, and this consent. If necessary, technical expertise shall be made available by the consent holder to interpret the monitoring data;
- (c) On an ongoing basis to evaluate the cultural impacts of Project Next Generation, and maintenance dredging, on Otago Harbour and the Te Tai o Arai Te Uru (Otago Coastal Marine Area);
- (d) To make recommendations to the consent holder on appropriate changes to the cultural monitoring framework to ensure that it delivers timely focused results for the improved management of the project.
- (iii) Proposed changes to the monitoring and/or dredging and disposal operation in response to recommendations of the MCG shall be reasonably considered by the consent holder and implemented to the extent practicable.
- (iv) The MCG shall be given an opportunity to comment on all proposed adaptive management measures before the consent holder finally considers them. Any adaptive management recommendation shall be submitted to the Consent Authority to ensure that it complies with the conditions of consent.
- (v) The consent holder shall, in complying with the notification requirements of this consent to the Consent Authority, or when monitoring or research activities are being planned, or when results are to be submitted in accordance with this resource consent, invite the MCG to a meeting to discuss any matter and share this information prior to submitting the information to the Consent Authority. The information shall be provided to the MCG sufficiently in advance of the meeting, and no less than 20 working days, so that the MCG has time to review and consider it.
- (vi) Notwithstanding clause (v) the consent holder shall, at least once per calendar year, invite representatives of the Consent Authority and the MCG to a meeting to discuss any matter relating to the exercise and monitoring of this consent. At this time the consent holder shall, in addition to any matters relating to the exercise and monitoring of this consent, use its best endeavours to inform the MCG of the likely dredging to be undertaken in the following year.
- (vii) The consent holder shall keep minutes of the meetings held in accordance with clause (v) and (vi) and shall forward them to all attendees.
- (viii) The meetings required by clause (v) and (vi) need not occur if the MCG notifies the consent holder (for clause (v) and (vi)) and the Consent Authority (for clause (vi)) that the meeting is not required.
- (ix) The consent holder shall provide final copies of the reports prepared in accordance with these conditions to the MCG concurrently with them being submitted to the Consent Authority.
- (x) The MCG shall be serviced by the consent holder.
- (xi) All members of the MCG shall use their best endeavours to resolve all issues before it. If any matter remains unresolved then the consent holder shall refer each unresolved matter to its Board immediately and the Board shall take all practicable steps to resolve any outstanding issues with Kaumatua including (if necessary) appointment of an independent mediator.

Reporting

22. The following shall be submitted to the Consent Authority in an Annual Report, no later than the anniversary of the date of the commencement of this permit:
- i. The volumes of material dredged consistent with Condition 7 of this consent.
 - ii. The results of the bathymetric surveys carried out at each disposal site consistent with Conditions 8A and 8B of this consent.
 - iii. Summary reports on any benthic monitoring or rocky reef monitoring required by Conditions 13 and 15 of this consent.
 - iv. A report on marine mammal sightings as required by Condition 11(c)(v) of this consent.
 - v. Details of any adaptive management carried out as required by Condition 18 of this consent.

General

23. During the exercise of this consent, the consent holder shall take all practicable precautions to protect public safety at all times.
24. The consent holder shall ensure that no fuel or oils enter into the coastal marine area as a result of these works. This shall include the maintenance of machinery at all times to prevent leakage of fuel or oil into the coastal marine area. In the event of contamination, the consent holder shall instigate remedial action and shall notify the Consent Authority as soon as practicable. Notification shall be no later than 48 hours after the event.
25. The consent holder shall in consultation with the Consent Authority's Harbourmaster and Maritime New Zealand to develop a proposal for how the enlarged disposal grounds are to be identified on the marine charts including maritime safety markers on the charts and the need for any prior notice to mariners. The proposal shall be submitted to the Consent Authority prior to any material being deposited beyond the historical disposal grounds identified on marine charts.

Review

26. The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this consent within three months of each anniversary of the commencement of this consent or upon any dispute, disagreement or inaction not being resolved in accordance with Condition 20 for the purpose of:

- (i) ensuring that the monitoring regime is appropriate; or
- (ii) determining whether the conditions of this consent are adequate to deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; including but not limited to:
 - (a) the effects of the exercise of this consent on the ecology and water quality of the near shore and offshore areas; or
 - (b) the effects of the exercise of this consent on surf breaks of national significance identified in the NZCPS (2010); or
 - (c) the appropriate mitigation of the environmental effects of the activity having regard to the available deposition technology.

Notes to Consent Holder

1. *The consent holder shall comply with all other maritime legislation when exercising this consent.*

Issued at Dunedin this 7th day of June 2017



Marian Weaver
Resource Manager Procedures and Protocols

Appendix 1

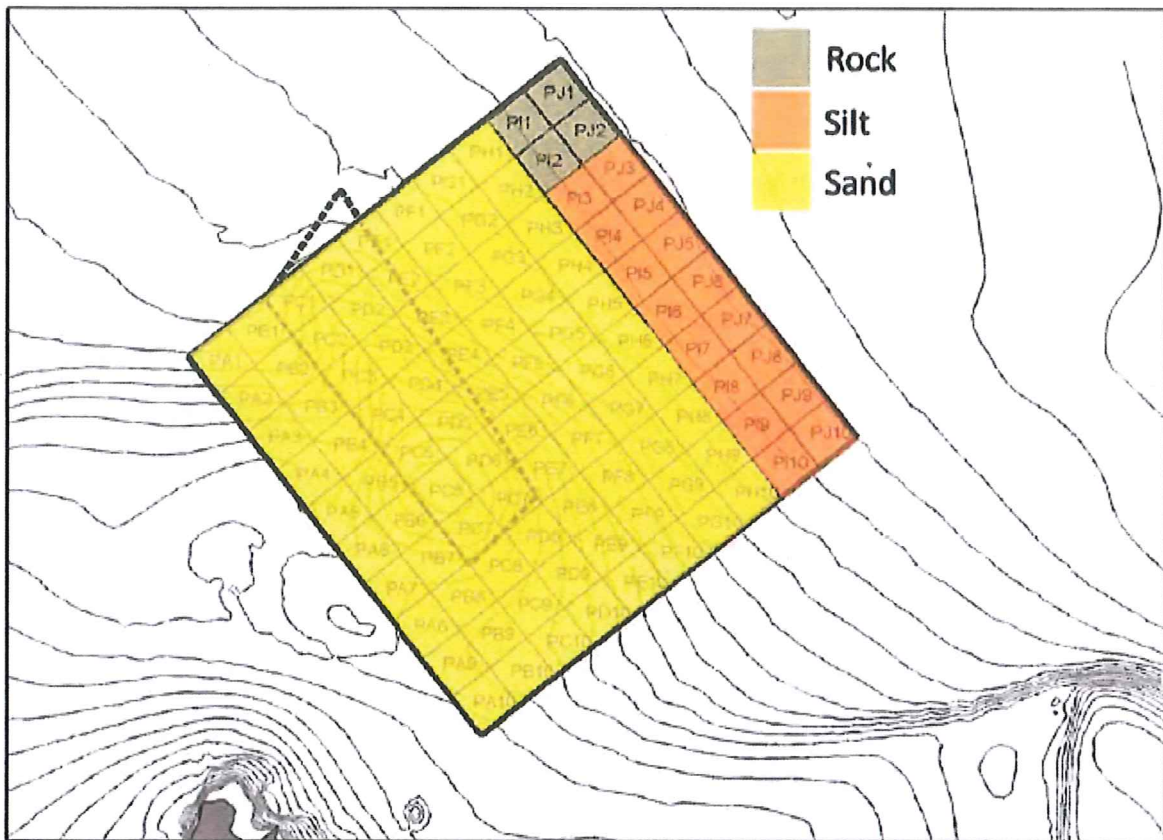


Figure 1 Heyward Point

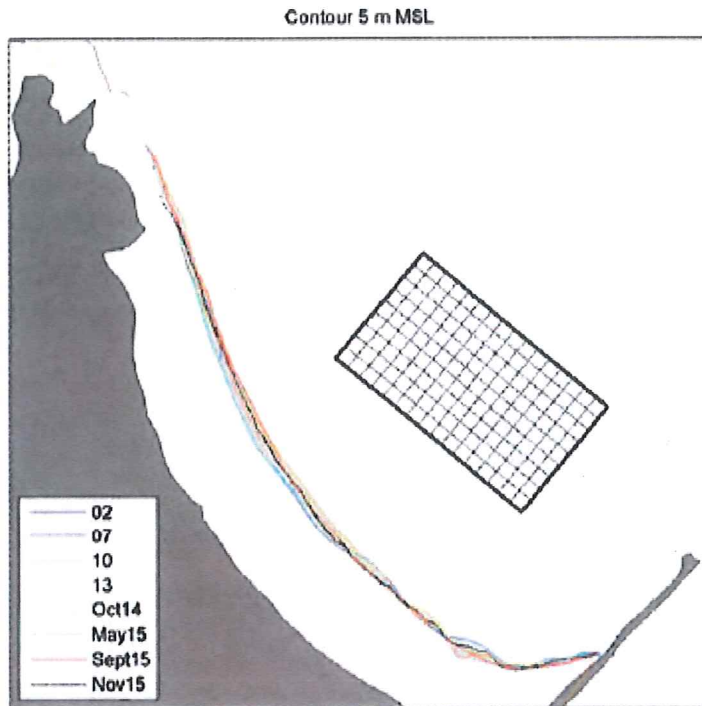


Figure 2 Historical baseline for the 5 m isobaths at Aramoana

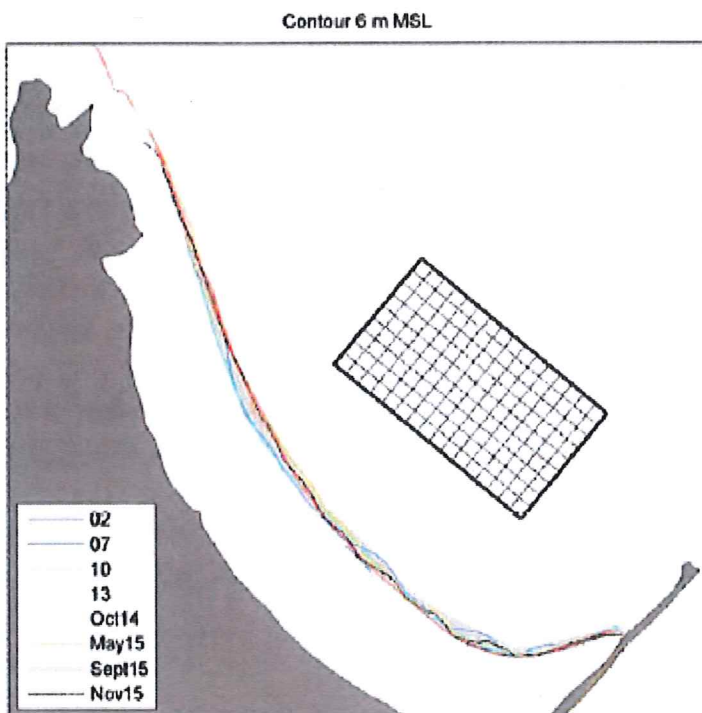


Figure 3 Historical baseline for the 6 m isobaths at Aramoana

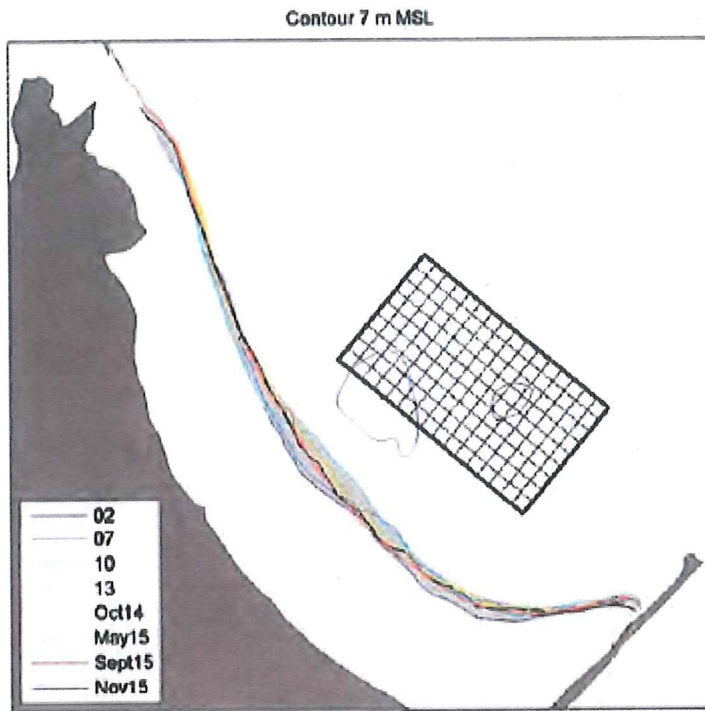


Figure 4 Historical baseline for the 7 metre isobaths at Aramoana