Ministry for Primary Industries
Manatū Ahu Matua

Potential relocation of salmon farms in the Marlborough Sounds

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New Zealand Government

Summary consultation document

The Minister for Primary Industries wants to hear your views on a proposal to amend the Marlborough Sounds resource management plan to enable relocation of up to six salmon farms in the Marlborough Sounds.

Relocation is being considered as a way to:

- ensure the environmental outcomes from salmon farming are improved through implementation of benthic best management practice;
- potentially improve the social and cultural outcomes from salmon farming by creating jobs, and moving salmon farms away from areas of high competing use;
- maintain or increase the economic benefits from salmon farming.

This proposal provides for industry growth through more efficient use of marine farming space, rather than from creating additional new space. In short, it's about getting better outcomes from the same amount of space. The extent of benefits would depend on the number of farms relocated and the sites they move to, which is why the Minister wants to hear your views.

An independent panel of three resource management experts will review the expert research reports, analyse all written submissions and hold public hearings after the written submission period. Based on its findings, the panel will provide a report and recommendations to the Minister for Primary Industries on how to proceed, in addition to final advice from agencies on the proposal and statutory requirements.

Relocation could reduce the impacts of salmon farming

It is important to the Government, iwi, the public and the aquaculture industry that the effects of salmon farming on the marine environment are managed well. The recently developed Best Management Practice Guidelines for Salmon Farming in the Marlborough Sounds: benthic environmental quality standards and monitoring protocol (Benthic Guidelines) were a key step: they provide a framework, endorsed by the community, science experts and industry leaders, to ensure effective monitoring and management of the effects of salmon farming on the seabed. Marlborough District Council, the Ministry for Primary Industries, and New Zealand King Salmon are committed to implementing the Benthic Guidelines at all their farms.

King Salmon has resource consents for 11 salmon farms within the Marlborough Sounds. Salmon farming results in organic matter accumulating on the seafloor and nutrient enrichment of the water column. These effects are greater in lower-flow areas, and this limits farm productivity. There are six consented salmon farms in lower-flow areas. These farms will have difficulty complying with the guidelines without significantly reducing production. The Minister proposes relocating some or all of the six farms.

Moving these farms to sites where the water is deeper and has higher flows would provide for a more sustainable, productive, and resilient industry without increasing the total amount of surface space occupied by salmon farm structures. To secure a consent to farm at a new site, applicants would have to relinquish consents and close down operations at an existing lower flow site.

The Government is committed to building and supporting a strong aquaculture industry. This proposal supports the Government's policy for aquaculture and is consistent with the Business Growth Agenda aim to increase the productivity of natural resources while reducing environmental effects.

Relocation could deliver environmental, social and economic benefits

New Zealand research on the environmental impacts of salmon farming and on salmon production technology has increased our knowledge about salmon farming in our coastal waters, including how to better site salmon farms to reduce environmental effects.

"In 2012, Professor Kenneth Black of the Scottish Association of Marine Sciences, an internationally recognised authority on aquaculture, reported that higher-flow sites are better for growing healthy salmon, and reducing environmental effects in the Marlborough Sounds."

Relocating up to six farms to more suitable locations expected to result in:

- better sustainability outcomes;
  - farms will meet the benthic guidelines;
  - reduced seafloor effects;
  - reduced effects on water quality;
  - improved salmon health and greater resilience to increasing sea temperatures;
  - opportunities for improved management of biosecurity risks;
  - improved environmental monitoring and adaptive management;
- potential better social outcomes;
  - farms moved out of areas with high recreational use and amenity;
  - improved visual effects from new low profile structures in recessive colours;
  - reduced noise, lighting, and odour effects;
  - farms moved away from populated bays;
- and improved economic outcomes the relocated farms could produce;
  - up to $49 million annually to regional GDP;
  - up to 511 Full Time Equivalent jobs.

Economic gains would occur over about 10 to 15 years as the sites are relocated and then developed in stages. These values are based on all six farms relocating.

If relocation of all the lower-flow farm sites proceeds:

- The number of residential dwellings in Queen Charlotte Sound/Tory Channel situated within one kilometre of a salmon farm would reduce from 21 to 3.
- In Pelorus Sound, there would be no residential dwellings with a direct line of sight within one kilometre of a salmon farm.
- New modern low profile structures in recessive colours would be used at the relocation sites, replacing existing farm structures that are decades old and visually intrusive.
- The proposed Waitata mid-channel site is positioned away from the coast and is a new concept for salmon farming in New Zealand. As this site is in the middle of the channel, it would not have a large accommodation barge. Instead it will only have a low profile feed receptacle.
- King Salmon would be required to provide advanced real-time monitoring buoys to ensure cumulative water quality effects are well monitored and managed. This technology could be applied to benefit the wider Sounds state of the environment monitoring. Under the proposal, any relocated farms would have to follow a staged adaptive management plan of gradually increased feed and production. This means that feed inputs would be carefully and gradually increased, and monitoring undertaken to measure the effects of the increase to ensure that significant adverse effects on water quality, benthic habitat and other matters of importance were not occurring. Depending on the

results of monitoring, feed inputs may stay the same, be increased further or be decreased. This is a precautionary approach to ensure environmental limits are not exceeded.

Up to six farms in Queen Charlotte Sound and Pelorus Sound could be relocated

The six existing lower-flow sites being considered for relocation are listed below and appear in **RED** on the attached maps.

Tōtaranui/Queen Charlotte Sound

- Ruakaka Bay
- Otanerau Bay

Te Hoiere/Pelorus Sound

- Forsyth Bay
- Waihinau Bay
- Crail Bay (two farms, not stocked since 2011)

Potential relocation sites are in Pelorus Sound and Tory Channel

The six potential relocation sites are listed below and appear in **BLACK** on the maps

Te Hoiere/Pelorus Sound

- Blowhole Point North
- Blowhole Point South
- Waitata Mid-channel
- Richmond Bay South
- Horseshoe Bay

Kura Te Au/Tory Channel

- Tio Point

Existing salmon farms that are **NOT** being considered for relocation appear in **BLUE** on the maps.

How the six potential relocation sites were selected

An initial list of potential sites was prepared for Treaty settlement obligations in 2012. This was refined to just 9 sites after considering a range of ecological, bio-physical, hydrological, fisheries and landscape/natural character information, in addition to social and cultural factors. This highlights the extremely limited opportunities for growth of salmon farming in the Marlborough Sounds.

The Marlborough Salmon Working Group was convened in mid-2016 to consider options to implement the benthic guidelines. The working group included nominated individuals from local and central government, iwi, community and interest groups, and the aquaculture industry. The group concluded there are just two viable options at this time: reducing stocking density and relocating farms to higher-flow sites.

The group also concluded that 3 of the potential relocation sites were suitable to proceed for public consultation, there were divergent views on the suitability of 3 sites, and 3 other sites were eliminated from further consideration.

The working group report will be available to view in full on the MPI website when consultation starts.

Relocating farms requires amending the Marlborough Sounds Resource Management Plan

Some of the potential relocation sites are in areas where aquaculture is currently prohibited (Coastal Marine Zone One, CMZ 1). The Minister for Primary Industries is considering recommending regulations, under section 360A of the Resource Management Act, which would change the Marlborough Sounds resource management plan to allow applications to the Marlborough District Council for resource consents to farm salmon at specific sites.

The regulations would also:

- Include provisions to ensure there is no overall increase in total surface structure area used for salmon farming in the Marlborough Sounds
- Close nearly all of the vacated space to aquaculture (one site would allow for continuation of mussel farming). Research undertaken by the Cawthron Institute in the Marlborough Sounds shows the seabed communities can recover to a functional state within five years of a farm being removed[1]
- Identify the activity of salmon farming in relocation sites as 'restricted discretionary' and include detailed conditions for consents
- Require implementation of staged adaptive management at any relocated sites, including staging of fish feed levels over time
- Consent applications would not be publicly notified, but Marlborough District Council would have the discretion to give limited notification to any affected person if written approval of the person cannot be obtained. This is because the regulations will address the substantive effects of salmon farming, and the public has the opportunity to input at this stage. This process, using an independent panel of resource management experts to make a report and recommendations to the Minister, will ensure public concerns which may otherwise arise through the resource consent process, will be addressed through the regulations (plan change).

An exact swap proposal has not been determined

An exact proposal for swapping specific lower-flow farms to specific higher-flow sites has not been determined. For example, because the potential relocation sites would be more productive, it might be possible to swap two of the lower flow sites for one of the higher flow sites. This would mean a reduction in the number of salmon farms in the Marlborough Sounds.

The Minister is interested in obtaining your views about the existing sites and the potential relocation sites to help inform his decision.

As the independent panel of three resource management experts will provide a report and recommendations to the Minister for Primary Industries on how to proceed, in addition to final advice from agencies on the proposal and statutory requirements, there could be three outcomes following consultation:

Outcome One	Make regulations under section 360A to change the Marlborough Sounds Resource Management Plan to enable relocation of all six existing lower-flow farms to the higher-flow potential relocation sites.
Outcome Two	Make regulations under section 360A to change the Marlborough Sounds Resource Management Plan to enable relocation of some lower-flow farms to the higher-flow potential relocation sites, while others remain in their present location.
Outcome Three	Not make regulations under section 360A and all existing lower-flow farms remain at their present location.

[1]Keeley, N.B., Macleod, C.K., Hopkins, G.A., Forrest, B.M., 2014. Spatial and temporal dynamics in macrobenthos during recovery from salmon farm induced organic enrichment: when is recovery complete? Mar. Pollut. Bull. 80, 250–262.

There will be costs and missed opportunities if relocation does not proceed

If relocation does not proceed, King Salmon is still committed to improving environmental management by implementing the benthic guidelines at all its farms. This would require initial fallowing of lower-flow farms for two to five years to allow the seabed to recover before recommencing production at reduced stock levels (and associated reduced feed levels).

Over the fallowing period it is estimated $10m GDP per annum and 105 Full Time Equivalent employees (FTEs) would be lost. After the fallowing period, there is scientific uncertainty about the exact stocking levels required for farms to meet the benthic guidelines. Therefore, GDP and FTE implications under both minimum and maximum stocking levels are based on estimates.

Under modelled minimum potential feed levels, all four of the currently operative lower-flow sites would become commercially unviable (Ruakaka, Waihinau, Forsyth, and Otanerau), resulting in a sustained loss of approximately $10 million GDP and 105 FTEs. Under the modelled maximum potential feed levels, three of the four sites (Waihinau, Forsyth, and Otanerau) would remain commercially viable at reduced production levels. Reduced production at these three sites is estimated to result in an ongoing loss, after the fallowing period, of $3.6 million GDP and 38 FTEs.

There would be more exposure to climate change risks and limited opportunities to improve fish health since farms would remain in lower flow sites. This could impact on Marlborough's global reputation for providing sustainable and premium products in competitive export markets. Social and amenity benefits would not be realised, as salmon farming would continue in the more populated bays.

Your feedback will help the Minister decide how to progress

The Minister for Primary Industries would like your feedback on the proposal to make regulations under section 360A of the Resource Management Act to amend the Marlborough Sounds Resource Management Plan to enable the relocation of up to six salmon farms. All are welcome to comment on this proposal.

Public drop-in sessions will be held during the consultation period. The Ministry for Primary Industries will also hold hui on the proposal with iwi authorities. There will then be an opportunity for people who make written comments to attend public hearings and talk about their comments with the Marlborough Salmon Farm Relocation Advisory Panel, comprised of independent resource management experts.

All written comments must be received by the Ministry for Primary Industries no later than 5pm on Monday 27 March 2017.

- Email to: **aquaculture.submissions@mpi.govt.nz**
- Post to:

  Salmon Farm Relocation

  Ministry for Primary Industries

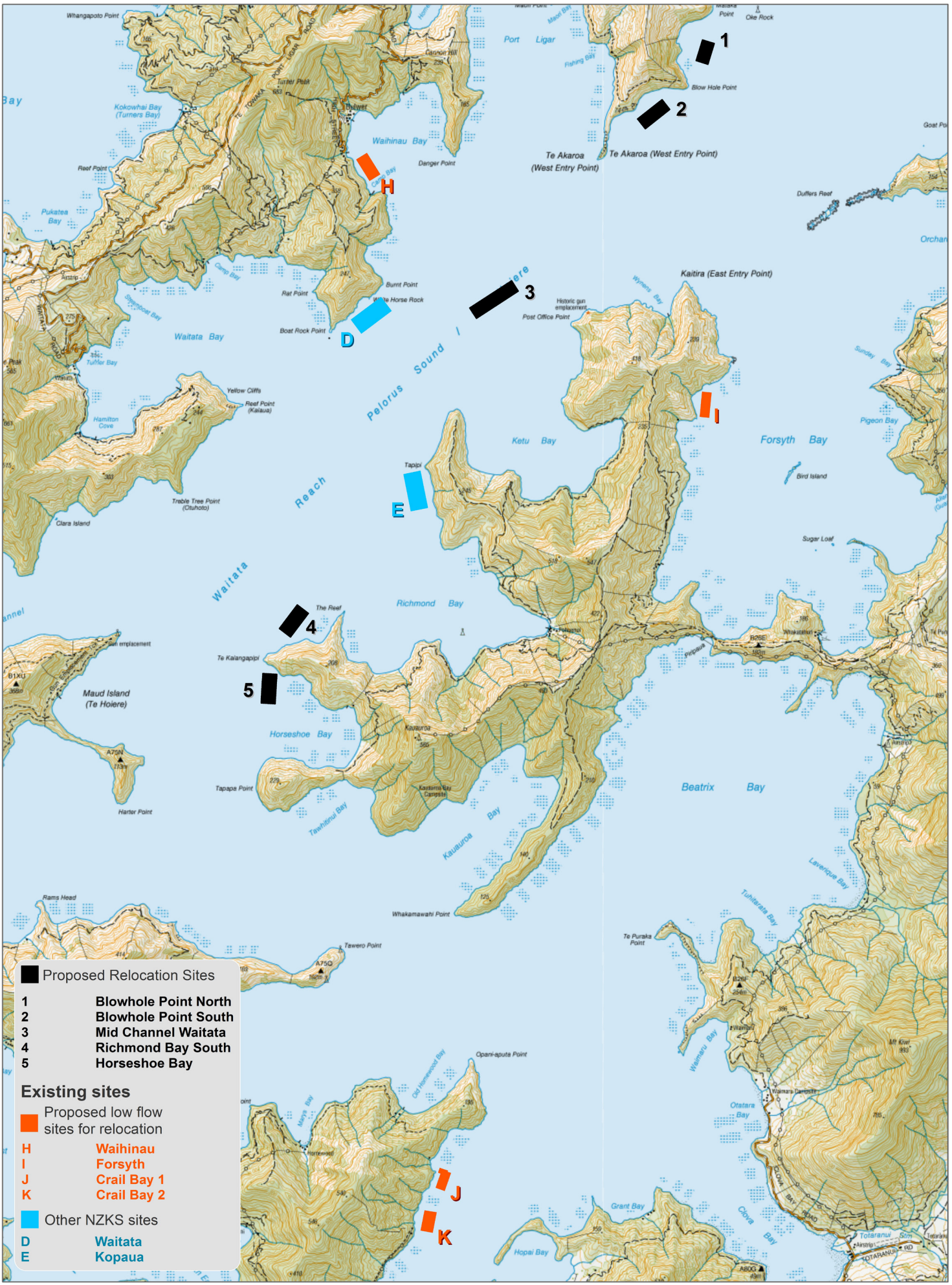
  Private Bag 14

  Port Nelson 7042

Where to find more information

The consultation document and supporting information – including the full set of technical reports assessing environmental effects (AEE), their associated peer review documents, and summary AEE, and the Marlborough Salmon Working Group advice report – are available to view or download from the Ministry for Primary Industries website (**www.mpi.govt.nz**). The consultation document includes the proposed regulations to change the Marlborough Sounds Resource Management Plan.

Please refer to the Ministry for Primary Industries website (www.mpi.govt.nz) for confirmed dates, times and venues of the public drop-in sessions, and public hearings.



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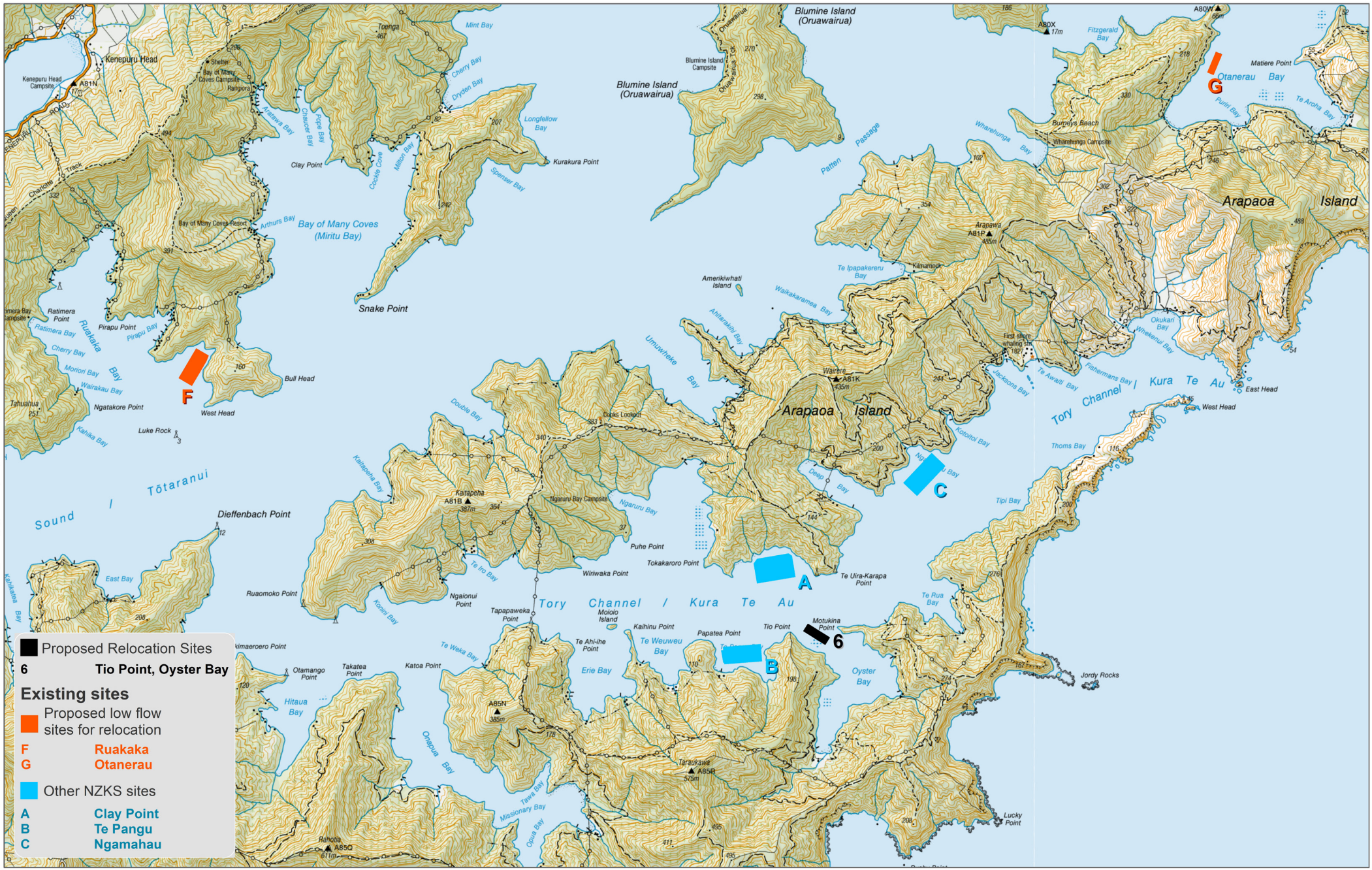
Coordinate System: NZTM

Map 1: Existing and Potential Relocation Sites Pelorus Sound, Marlborough

Data Attribution:
This map uses data sourced from LINZ under CC-By and Hillshade data, 2003, Geographx.

Date: 11/11/2016
Produced by: Spatial Analysis Solutions
Ref: r160467



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Coordinate System: NZTM

Map 2: Existing and Potential Relocation Sites
Queen Charlotte Sound, Marlborough

Date: 11/11/2016
Produced by: Spatial Analysis Solutions
Ref: r160467