Tuesday, 9 May 2017

Proposed Marlborough Salmon Farm Relocation

This slideshow was presented to the Marlborough Salmon Farm Relocation Advisory Panel on Tuesday, 9 May 2017. It is intended as an accompaniment to *Working Paper 2017/02 – Letter to the Minister on New Zealand King Salmon*, which can be found at mcguinnessinstitute.org/working-papers.

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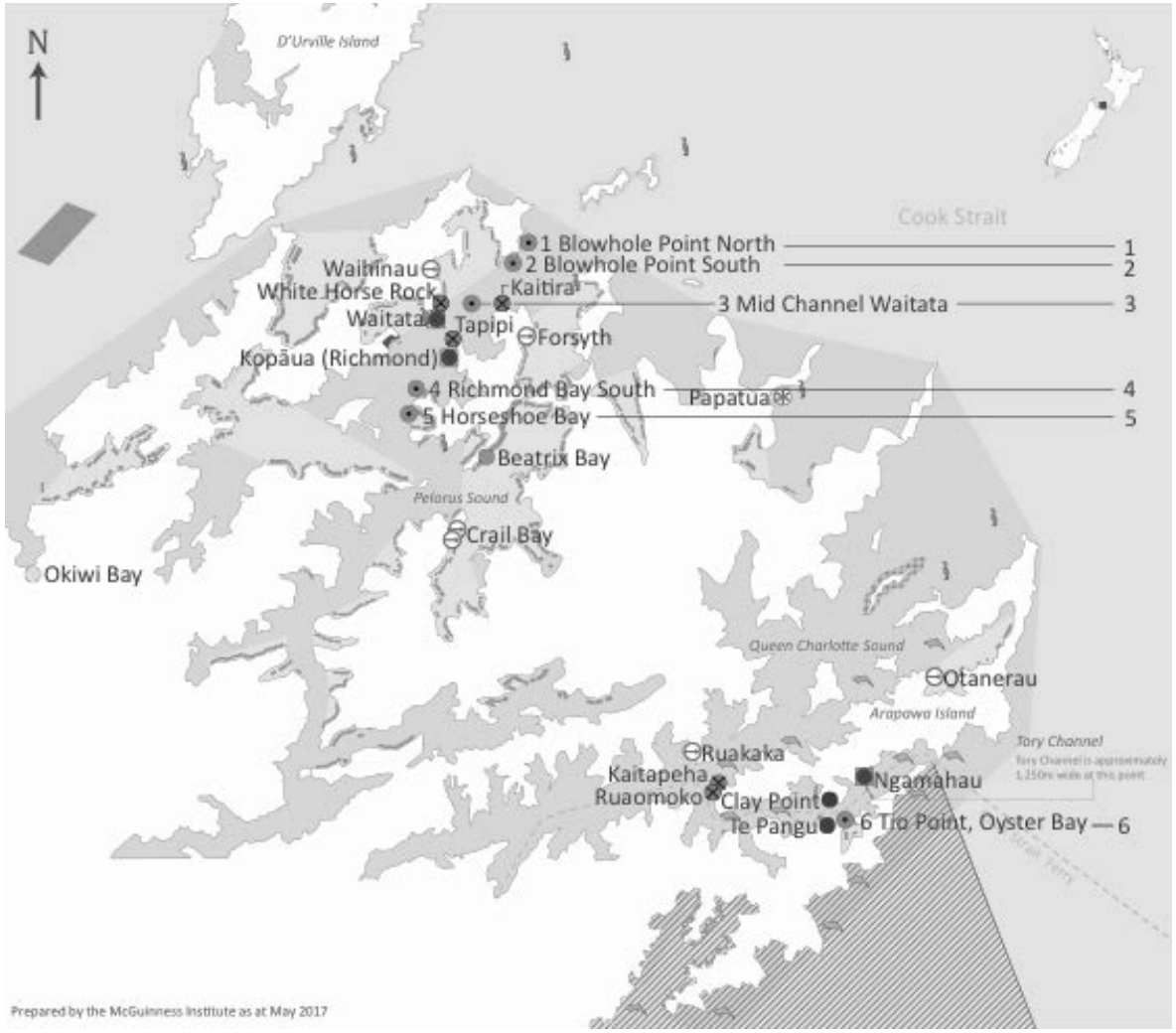
Map of the salmon farms



Is the relocation proposal a second bite of the cherry?

The low-flow farm sites were taken into account when the BOI heard the evidence in 2012 and declined five of the nine farms in 2013.

Is this a swap or is this something NEW?

When is a salmon farm not a salmon farm?

NZKS's historic four year salmon production levels at low-flow sites

Site	FY12 (mt)	FY13 (mt)	FY14 (mt)	FY15 (mt)	Two-year average (FY 14-15) (mt)
Otanerau	829	752	638	706	672
Ruakaka	992	938	741	806	773
Forsyth	0	0	0	0	0
Waihinau	1411	1489	694	880	787
Crail MFL 32	544	0	0	0	0
Crail MFL 48	0	0	0	0	0

Source for historic four year salmon production levels at low-flow sites: Sam Best, New Zealand King Salmon, September 2016.

Source: PricewaterhouseCoopers. (2016). *Marlborough Salmon Relocation – Economic Impact Assessment*, p. 58.

Are the Crail Bay farms really farms?

'…we've also reasonably recently purchased sites here in Crail Bay from Pacifica. We purchased those because we needed the fish. However we are not operating the Crail Bay farms as they're uneconomic. One may be used for research in the future but not for production in the long term.'

Source: Mark Gillard. (27 August 2012). *Transcript of Proceedings – Board of Inquiry: New Zealand King Salmon Proposal*, p. 11, line 33.

If they are treated as farms under the proposal, should Crail Bay farms be the first to relocate?

Cabinet is told to relocate the Crail Bay farms last …

'The Council, Department of Conservation and Ministry for the Environment support the proposal going out to public consultation, provided two consented sites at Crail Bay, which have not been used since 2011, are indicated as the lowest priority for relocation.'

Source: Office of the Minister for Primary Industries. (December 2016). *Consultation proposal on potential relocation of salmon farms in the Marlborough Sounds* (redacted Cabinet paper), p. 8, para 37.

NZKS tells the panel relocate the Crail Bay farms first …

'… So there's a change to the order so the first farms to move are the Crail Bay farms and the last one to move Waihinau.'

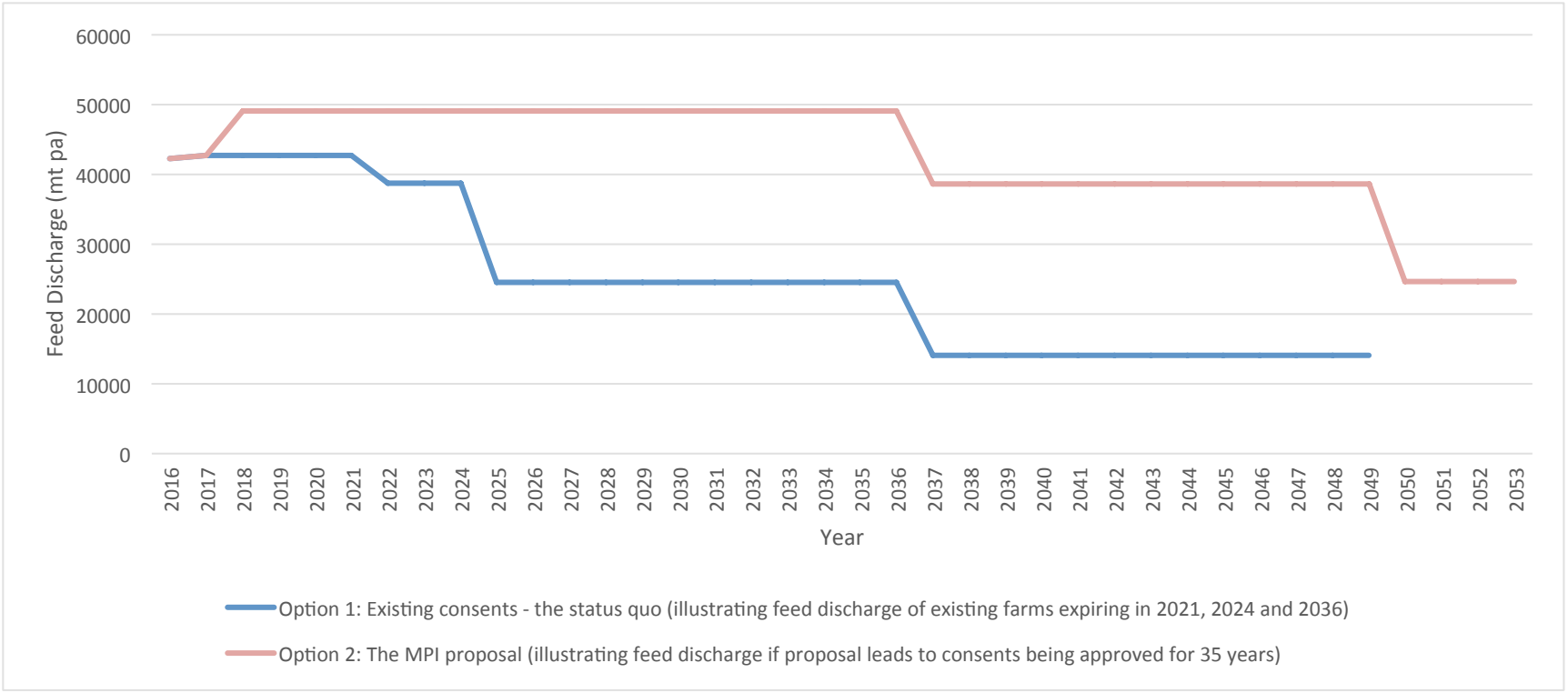
Source: Quentin Davies. (18 April 2017). *Transcript of Proceedings, Marlborough Salmon Relocation Advisory Panel Public Hearing*, p. 51, line 11.

Is the Forsyth Bay farm a farm?

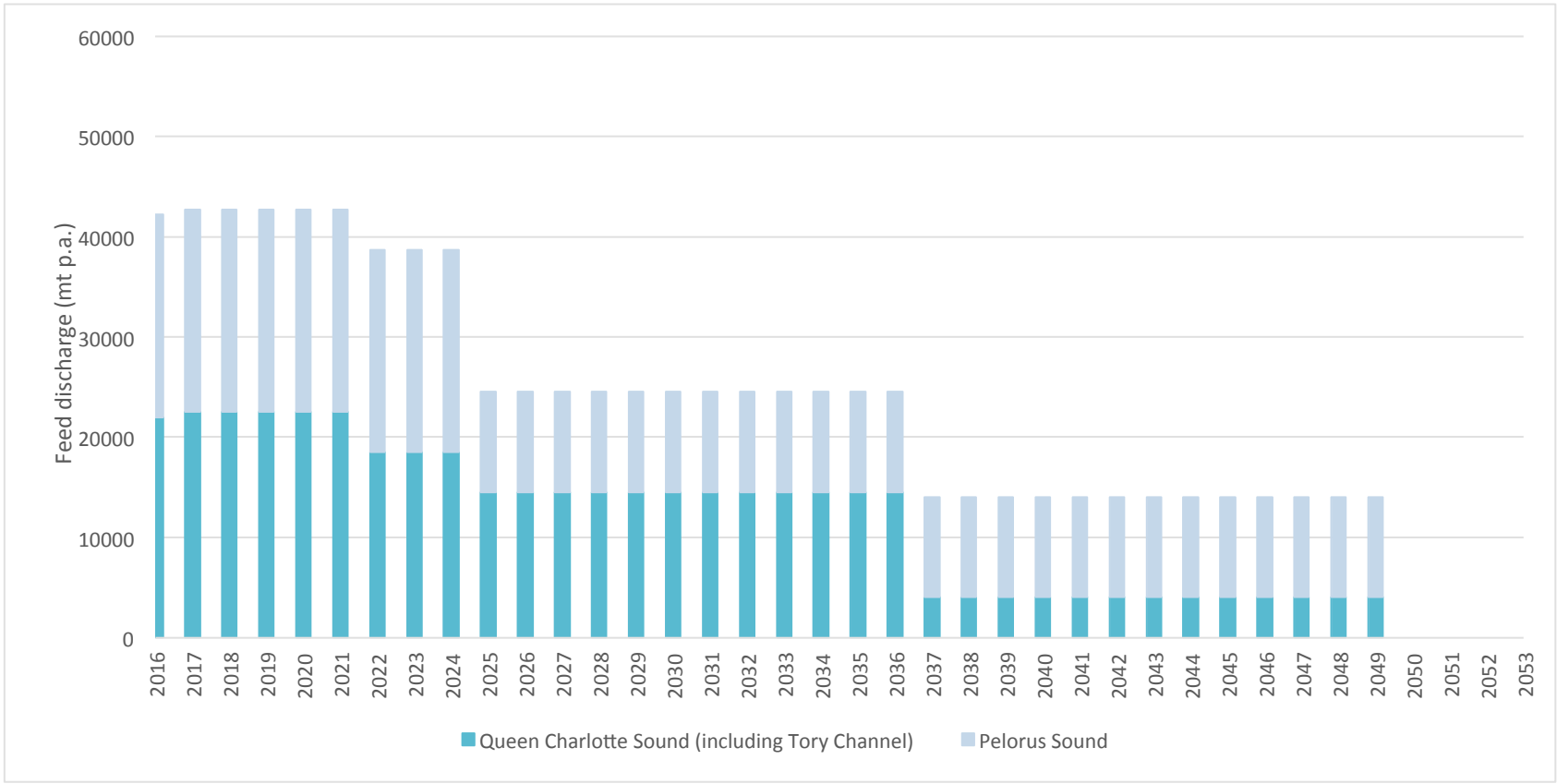
'…and this has been demonstrated by the fallowing of New Zealand King Salmon's Forsyth's Bay *[sic]* farm. This was fallowed to understand the natural recovery processes better for several years.'

Source: D. Nolan. (27 August 2012). *Transcript of Proceedings – Board of Inquiry: New Zealand King Salmon Proposal*, p. 69, line 15.

1: Comparing feed discharge (existing consents and the MPI proposal)



2: Option 1: Existing consents (the status quo) Total feed discharge by Sound



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3: Option 2: MPI proposal
Total feed discharge by Sound

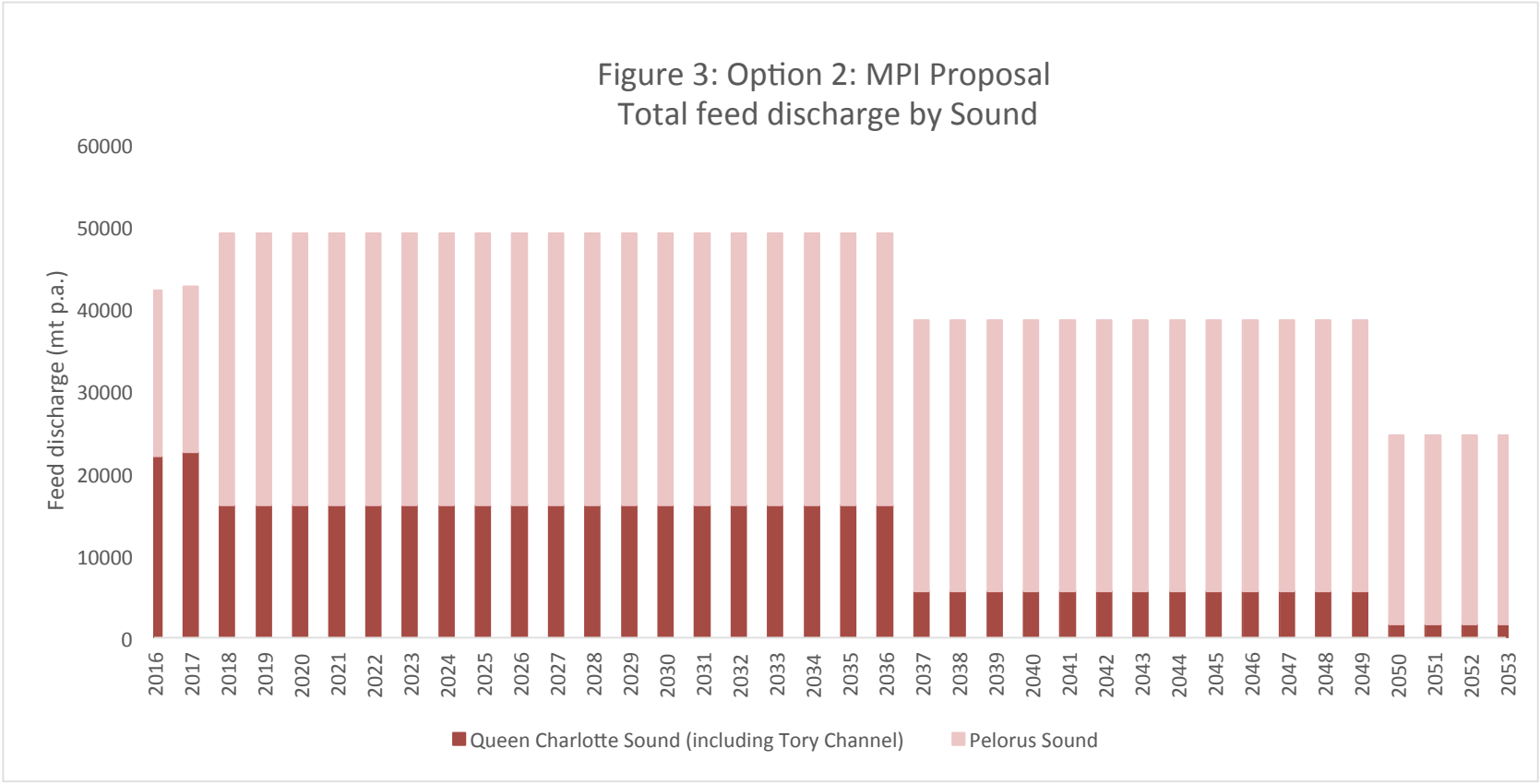


Table 1: List of research commissioned for MSWG

90% was prepared by the 2012 NZKS BOI team.

Research	Provider
Navigation	Navigatus Consulting Ltd
Landscape and natural character	Hudson and Associates
Tourism and recreation	TRC Tourism Ltd
Seabirds	NIWA
Marine mammals	Cawthorn and Associates
Pelagic fish	Statfishtics
Benthic	NIWA and Cawthron Institute
Water quality	NIWA and Cawthron Institute
Discharges (Cu/Zn, greywater)	Cawthron Institute
Disease and pests	DigsFish and Cawthron Institute
Biosecurity	Cawthron Institute
Underwater lighting	Cawthron Institute
Noise	Marshall Day Acoustics
Cultural impact assessment	Maximize Consulting Ltd
Heritage impacts	Heritage Works
Social impacts	Taylor Baines & Associates
Economic analysis	PwC
Operations	NZKS
Engineering	OCEL

Source: Marlborough Salmon Working Group. (2016). *Marlborough Salmon Working Group Advice to the Minister of Aquaculture*, p. 30. Retrieved from www.mpi.govt.nz/document-vault/15982.

Excerpt from the *Independence Guide* for auditors

Members of the accounting profession have a responsibility to act in the public interest. In doing so, members shall observe and comply with the fundamental principles in the Code:

a) Integrity
b) Objectivity
c) Professional competence and due care
d) Confidentiality
e) Professional behaviour

Members shall be guided by the spirit and not merely the words of the Code

Independence requires an individual member to act with integrity and to exercise objectivity and professional scepticism. Members are obliged to be straightforward and honest in professional and business relationships and not to allow their judgement to be compromised by bias, conflict of interest or the undue influence of others.

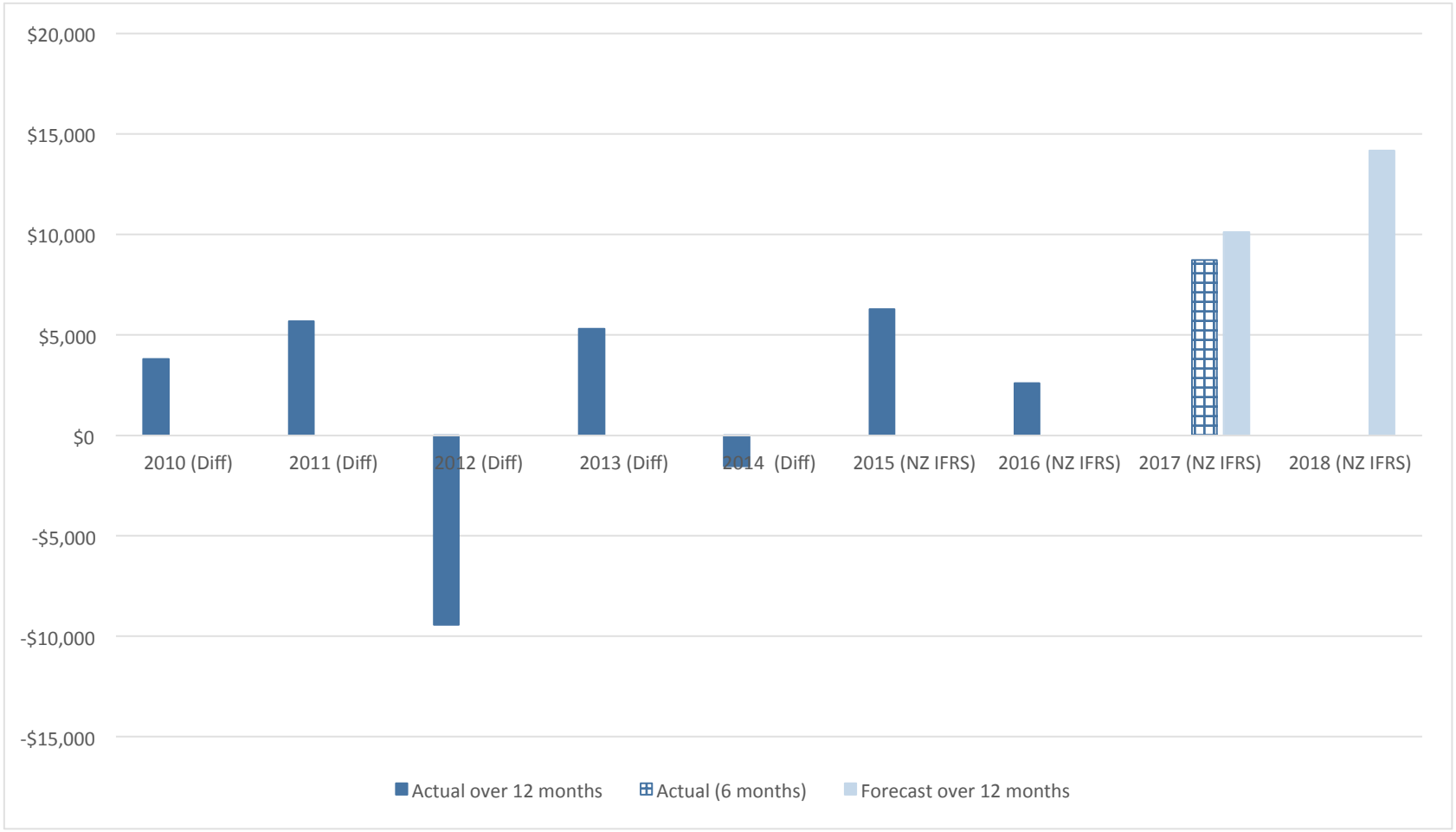
Independence comprises both:

- Independence of mind
- Independence in appearance

This means that members must not only be independent in action but they must also be perceived, by an informed third party, to be independent. This is particularly relevant when providing assurance services.

Source: Joint Accounting Bodies (CPA Australia Ltd., The Institute of Chartered Accountants in Australia & The Institute of Public Accountants). (2013). *Independence Guide, Fourth Edition*, p. 9.

4: Net profit/loss for the year ($000)



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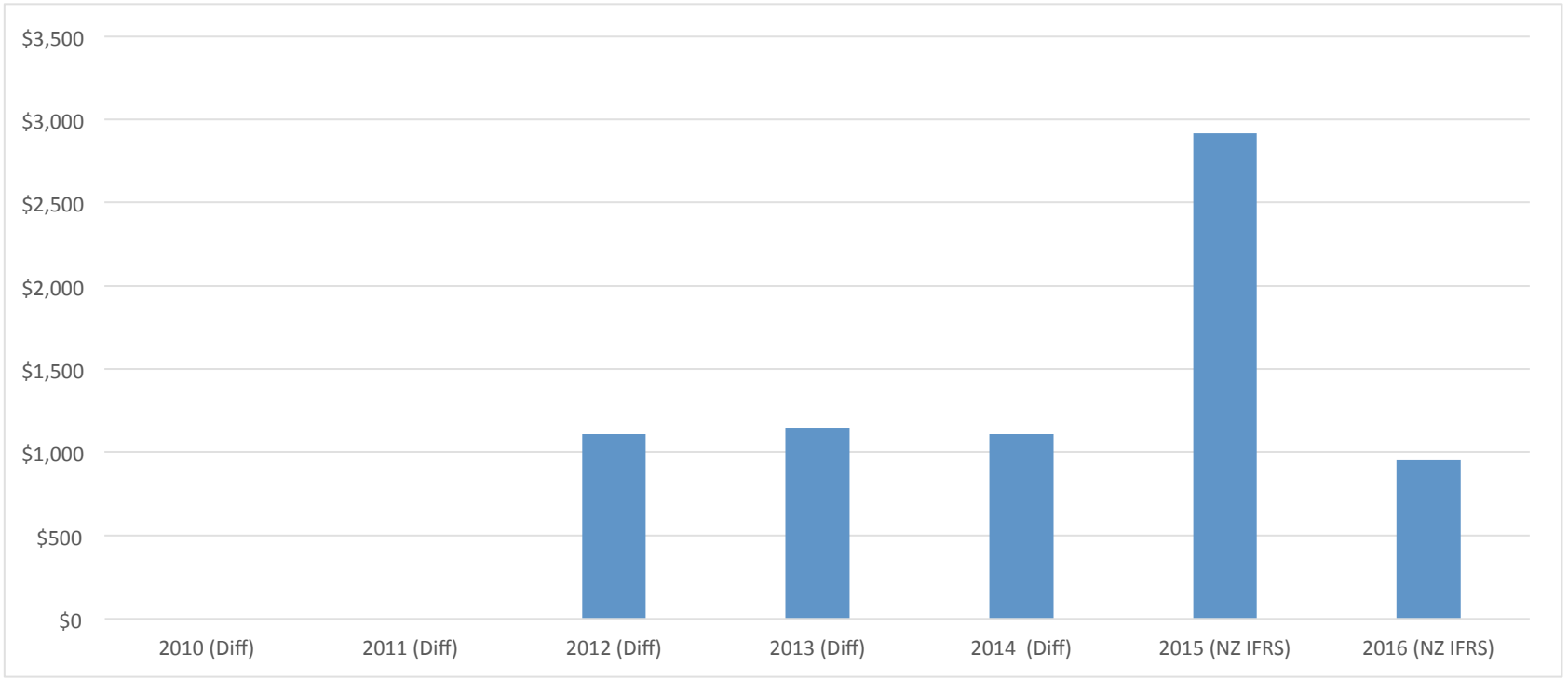
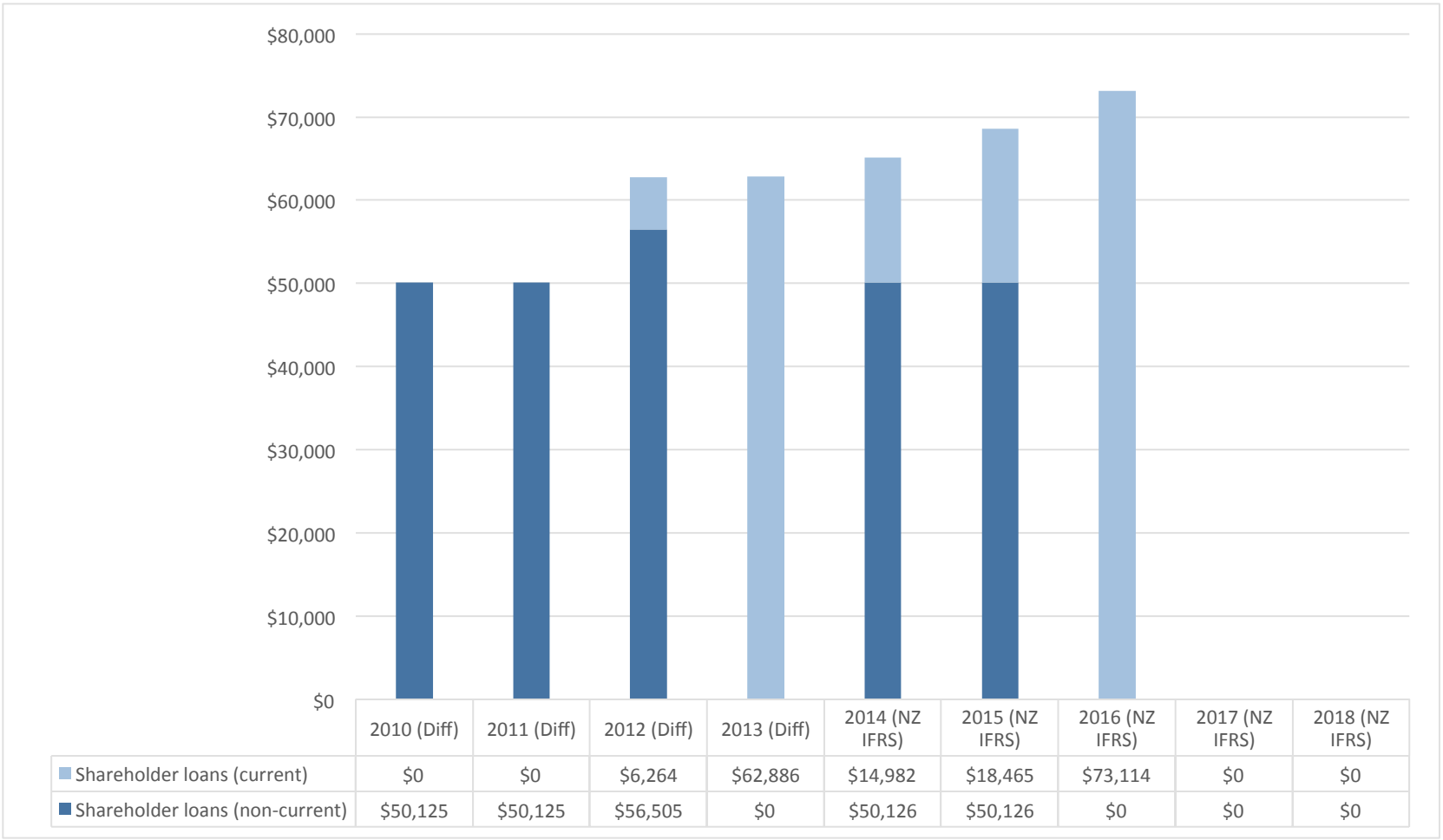
5: Fish health events (mortalities) net of insurance proceeds ($000)



6: Shareholder loans ($000)



	2010 (Diff)	2011 (Diff)	2012 (Diff)	2013 (Diff)	2014 (NZ IFRS)	2015 (NZ IFRS)	2016 (NZ IFRS)	2017 (NZ IFRS)	2018 (NZ IFRS)
Shareholder loans (current)	$0	$0	$6,264	$62,886	$14,982	$18,465	$73,114	$0	$0
Shareholder loans (non-current)	$50,125	$50,125	$56,505	$0	$50,126	$50,126	$0	$0	$0

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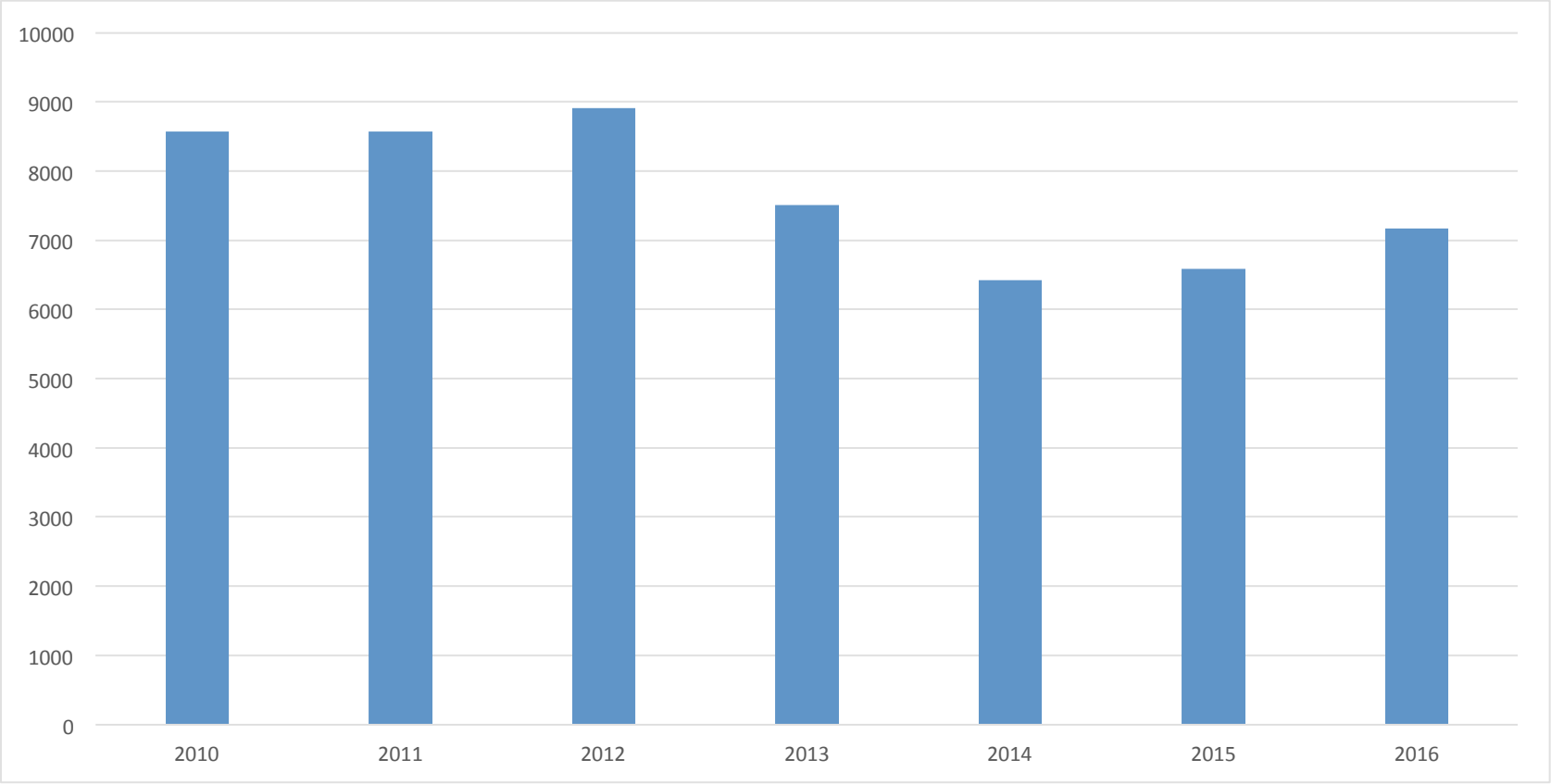
7: Excerpt from NZX of NZKS share prices

8: Biomass (live weight)
Fish harvest for the year (kg 000)



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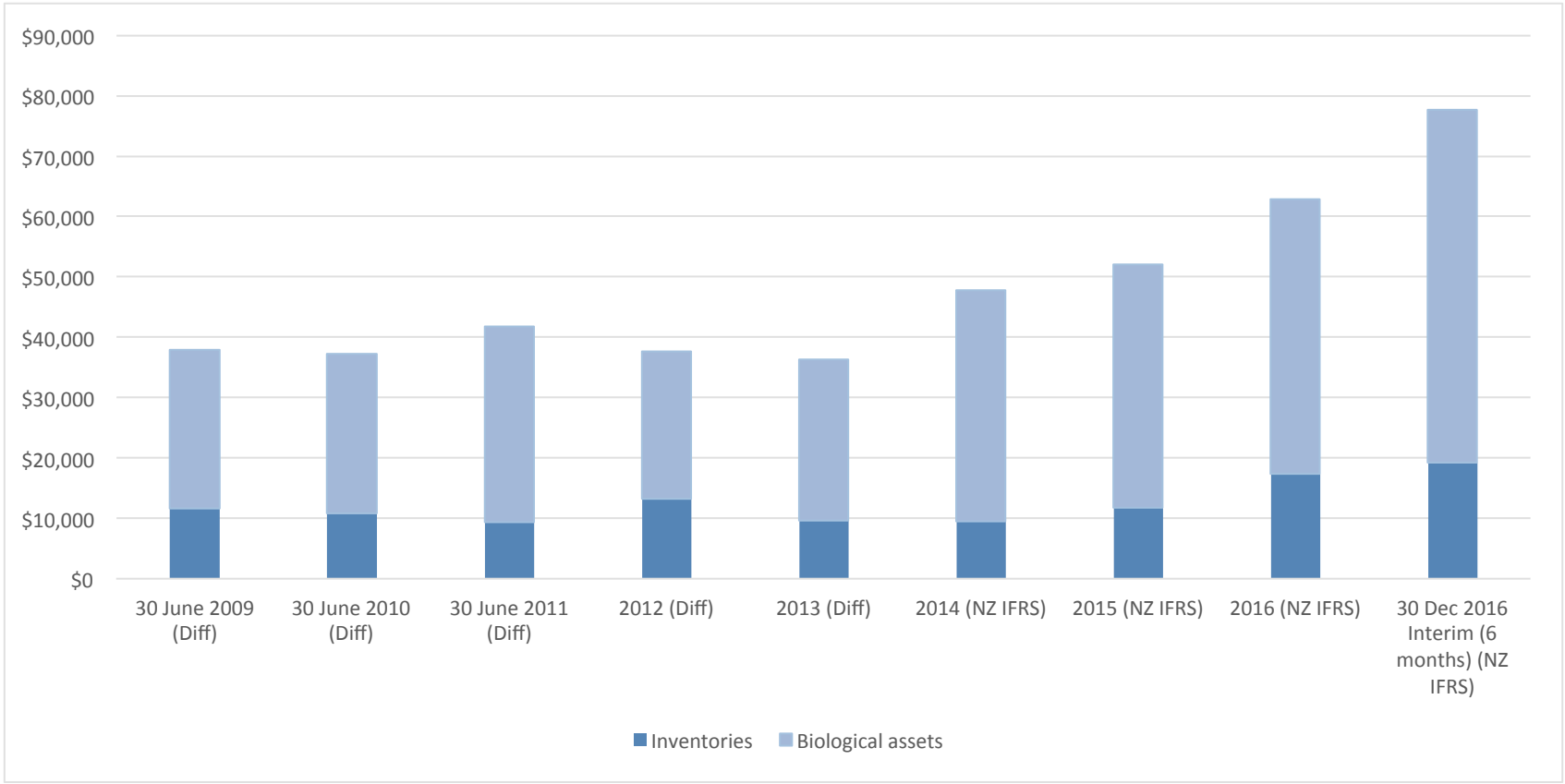
9: Inventories and biological assets ($000)



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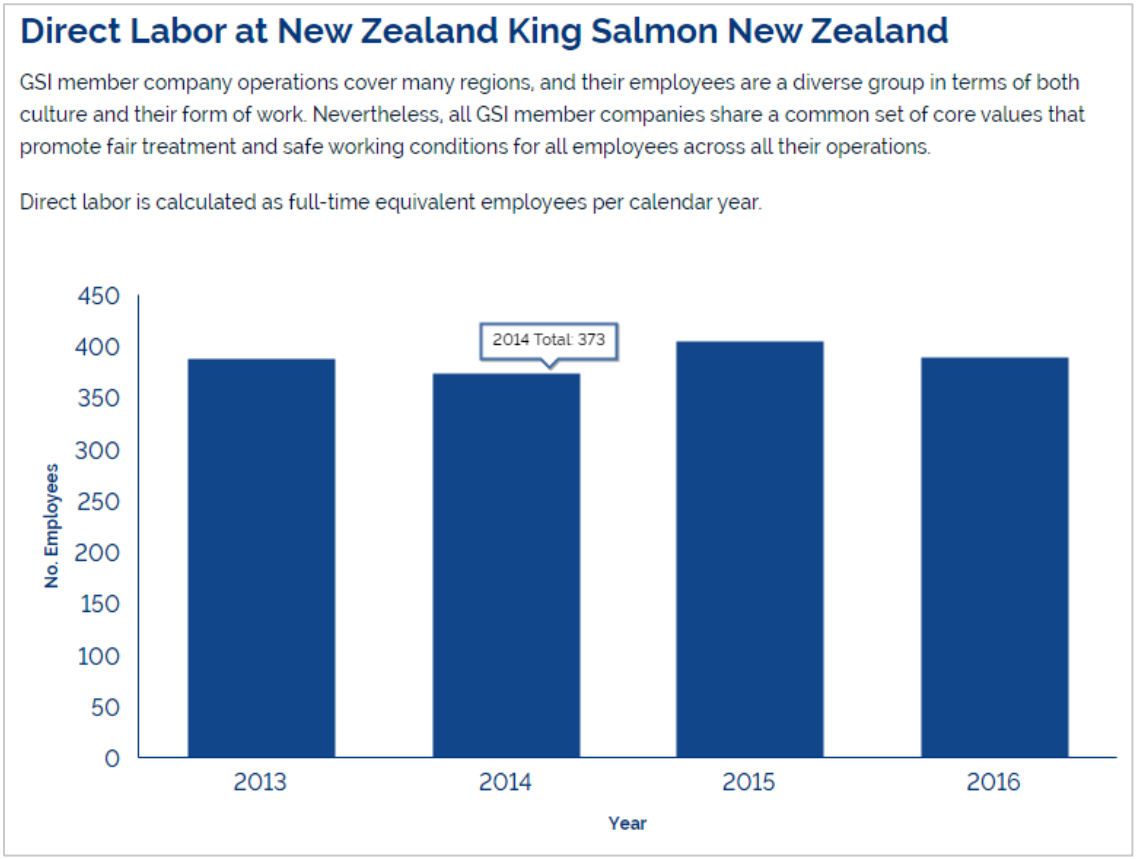
10: Direct labour from 2013 – 2016 (by calendar year)



Source: Global Salmon Initiative. (2016). *Global Salmon Initiative*. Retrieved from www.globalsalmoninitiative.org/en/sustainability-report/sustainability-indicators.

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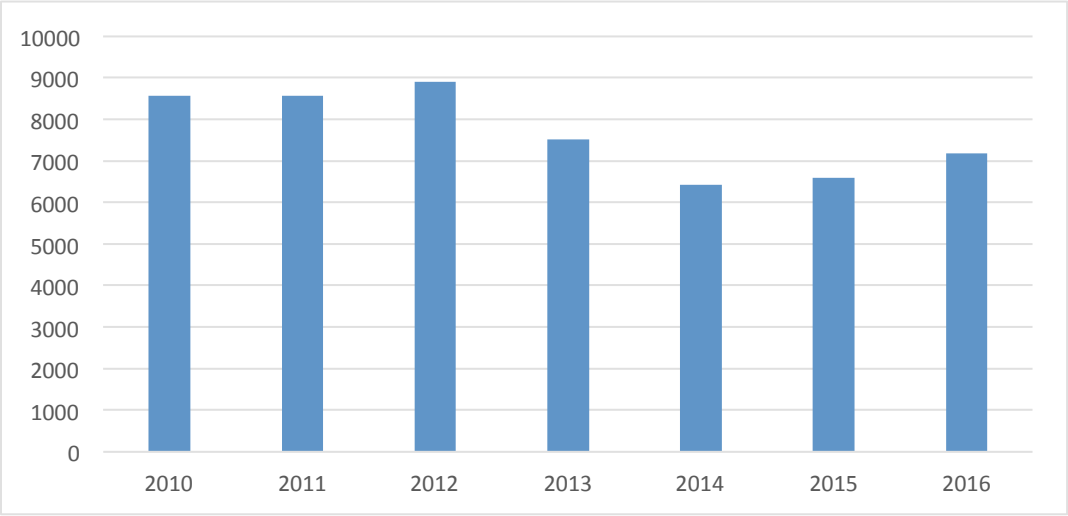
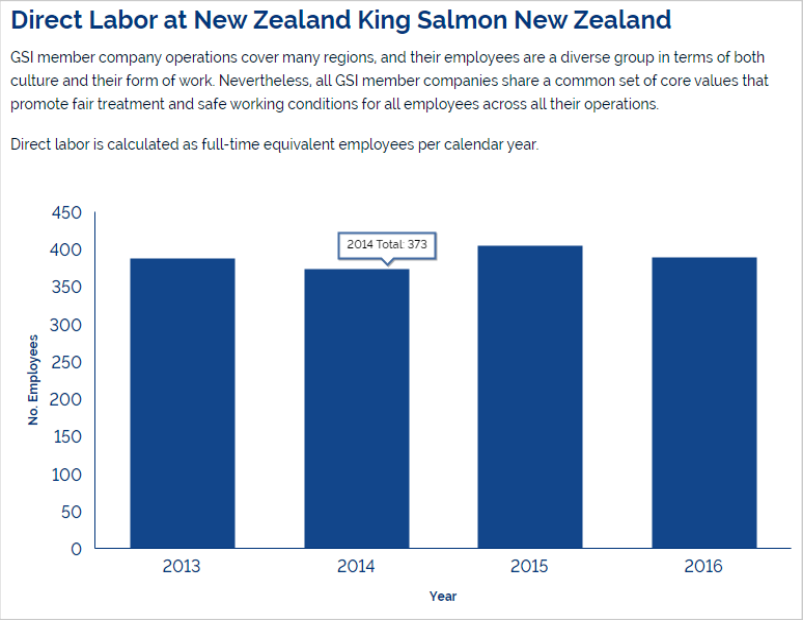
Comparing FTEs with production





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PwC report findings

Table 41: Total economic impacts, combined production limits

	Column A BMP maximum production, incorporating commercial viability and operational considerations		Column B Baseline production		Column C **Estimated decrease** in economic impact from implementing maximum BMP production, incorporating commercial viability and operational considerations	
Salmon Farm	Value add ($m)	FTE	Value add ($m)	FTEs	Value add ($m)	FTEs
Otanerau	3.0	31	3.1	32	0.1	1
Ruakaka	0	0	3.5	37	3.5	37
Forsyth	1.7	18	1.7	18	0	0
Waihinau	1.7	18	1.7	18	0	0
Crail Bay MFL 32	0	0	0	0	0	0
Crail Bay MFL 48	0	0	0	0	0	0
Total	6.4	67	10.0	105	3.6	38

The economic impact from the six low-flow sites operating under maximum production BMP guidelines, incorporating commercial viability and operational considerations compared to baseline production is an estimated **decrease** in annual value add of $3.6 million and an estimated 38 fewer FTEs supported annually.

Source: PricewaterhouseCoopers. (2016). *Marlborough Salmon Relocation – Economic Impact Assessment,* p. 49.

Reconciliation of PwC's Table 41

PwC *Economic Impact Assessment* report reconciliation of Table 41 (November 2016)

Prepared by McGuinness Institute 9 May 2017

Value add ($m)			Table 41 (p. 49)			
	Column A (i)	Column A (ii)	Column A (iii)	Column B	Column C	Column D
	Total economic impacts from BMP guidelines (From Table 24 (p.36))	Adjustments 'incorporating commercial viability and operational considerations'	BMP maximum production, incorporating commercial viability and operational considerations (also from Table 25, p. 37)	Baseline production (also from Table 16, p. 31)	**Estimated decrease** in economic impact from implementing maximum BMP production, incorporating commercial viability and operational considerations	**Estimated decrease** in economic impact from implementing maximum BMP production
McGuinness Institute terminology	Best practice[1]	Adjustments by NZKS[2]	Adjusted best practice[3]	Worst practice	Difference	Difference
	Col A (i)	Col A (ii)	Col A (iii)	Col B	Col C = Col A-Col B	Col D = Col A (i)-Col B
Otanerau	3	0	3	3.1	-0.1	-0.1
Ruakaka[4]	3	3	0	3.5	-3.5	-0.5
Forsyth[5]	4	2.3	1.7	1.7	0	2.3
Waihinau[5]	4	2.3	1.7	1.7	0	2.3
Crail Bay MFL32[4]	2	2	0	0	0	2
Crail Bay MFL48[4]	2	2	0	0	0	2
Total	18	11.6	6.4	10	-3.6	8

[1] P. 36: 'The BMP production figures assume that the benthic impacts are the limiting factor.'

[2] We were unable to determine what supporting evidence was used to make these adjustments.

[3] P. 36: 'The figures in Table 25 ... consider the benthic impacts in conjunction with the commercial viability and operational considerations of each site as the limiting factor.'

[4] Assumption 1 – NZKS say they will not operate these sites as not commercially viable: 'If the sites are not commercially viable, the resulting economic contribution is nil.' NZKS have advised PwC that Ruakaka and the two Crail Bay sites are not commercially viable (see p. 36). Cabinet Paper December 2016 p. 4, FN 4 states: 'Given they have not been used recently they are the lowest priority for location.'

[5] Assumption 2 – NZKS say they will operate these sites even though they are not commercially viable: 'From discussions with MPI and NZKS, we understand that NZKS would operate the Forsyth and Waihinau salmon farm sites even if they were not commercially viable as stand-alone operations, as they would help achieve single year class on NZKS's Pelorus high-flow-sites.' (p. 37)

Note: Baseline production refers to potential future production not operating under best manangement practice (BMP) guidelines at six existing low-flow salmon farm sites. (p. 29)

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Recommendations

- The Panel should be aware that the BOI already took the low-flow farms into account in the 2013 decision.
- MPI and the Panel should request the Excel document discussed in the PwC report (see below). We believe this will be much more informative in terms of the commercial reality of the existing farms than the *Economic Impact Assessment* report.

> NZKS has provided an Excel model which calculates earnings before interest and tax (EBIT) for each operational salmon farm site.[40] We have checked the arithmetic used to calculate FY16 EBIT for all operational salmon farms and EBIT for Ruakaka, Waihinau and Otanerau using the maximum projected salmon production under BMP guidelines. We found that the calculation is internally consistent with NZKS's EBIT calculated using NZKS's audited FY16 statement of comprehensive income, which is provided in the model.[41]

Source: PricewaterhouseCoopers. (2016). *Marlborough Salmon Relocation – Economic Impact Assessment*, p. 36.

Option 1: Advise the Minister that a cost-benefit analysis and public consultation on the cost-benefit analysis is required before you are able to prepare your final report and recommendations.

Option 2: Advise the minister that the proposal should be declined on the basis that it would be better undertaken as part of the mid-2017 MPI consultation on the national direction of aquaculture.

Tuesday, 9 May 2017

Thank you