As at 20170508

Figures 1,2 and 3: Feed Discharge NZKS - as at 30 April 2017

Assumptions and notes:

1. Table (A) outlines maximum consented feed discharge figures for existing farms. These figures and their expiry dates are taken from the individual numbered resource consents of each site.
2. Table (B) includes some of the same figures as Table (A) but is adjusted for the conditions of the proposal. The figures for the new farms are taken from MPI Discussion Paper No: 2017/04. We note that in MPI Discussion Paper No: 2017/04, consented maximum discharge for the Waitaia MidChannel (new) site was reported as 7000 on p. 39 and 6000 on p. 84. We have assumed that 7000 is the correct figure.
3. The individual resource consents for each site do not have a standardised format clearly outlining the start and expiry dates for each consent alongside the maximum consented feed discharge. This means that we may have misunderstood the exact operation of a consent in relation to its precise start and end date.
4. It is assumed that the proposed maximum feed discharge levels are consented for 35 years.
5. Use of a red font indicates data used in the test of the Letter to the Minister.

I: Farms

(A) Maximum consented feed discharge (source: numbered resource consents for each site)

Sound	Farm	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Queen	Ruataika UD21247	4000	4000	4000	4000	4000	4000				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pelorus	Forsyth UD40412	4000	4000	4000	4000	4000	4000	4000	4000	4000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pelorus	Waihinau MFL456	3000	3000	3000	3000	3000	3000	3000	3000	3000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queen	Otanerau UD40217	4000	4000	4000	4000	4000	4000	4000	4000	4000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tory	Clay Point USD9246 (changed to USD675 in January 2017)	4000	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pelorus	Crail Bay USD6014	1440	1440	1440	1440	1440	1440	1440	1440	1440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pelorus	Crail Bay USD6040	1770	1770	1770	1770	1770	1770	1770	1770	1770	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tory	Te Pangu USD3081	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	0	0	0	0
Pelorus	Waitaia USD4294	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	0	0	0	0
Pelorus	Kopaua USD4295	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	0	0	0	0
Tory	Ngamahau USD5296	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	0	0	0	0
Option 1: Existing consents - the status quo (illustrating feed discharge of existing farms expiring in 2021, 2024 and 2036)		42210	42710	42710	42710	42710	42710	38710	38710	38710	34500	34500	34500	34500	34500	34500	34500	34500	34500	34500	34500	34500	34500	34500	34500	34500	34500	34500	34500	34500	34500	34500	34500	34500	34500	0	0	0	0
Total feed discharge approved for the three farms from the 2011 application		14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	0	0	0	0

(B) Maximum consented feed discharge for all NZKS farms (source: current resource consents and MPI Discussion Paper 2017/04, pp. 39 and 84)

Sound	Farm	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Queen	Ruataika UD21247	4000	4000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pelorus	Forsyth UD40412	4000	4000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pelorus	Waihinau MFL456	3000	3000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queen	Otanerau UD40217	4000	4000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tory	Clay Point USD9246 (changed to USD675 in January 2017)	4000	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pelorus	Crail Bay USD6014	1440	1440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pelorus	Crail Bay USD6040	1770	1770	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tory	Te Pangu USD3081	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	0	0	0	0
Pelorus	Waitaia USD4294 (new as of 2012 proposal)	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	0	0	0	0
Pelorus	Kopaua USD4295 (new as of 2012 proposal)	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	0	0	0	0
Tory	Ngamahau USD5296 (new as of 2012 proposal)	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	0	0	0	0
Pelorus	Blowhole Point North (MPI proposal 2017)			4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500
Pelorus	Blowhole Point South (MPI proposal 2017)			5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000
Pelorus	Waitaia MidChannel (MPI proposal 2017)			7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000
Pelorus	Richmond Bay South (MPI proposal 2017)			5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000
Pelorus	Horseshoe Bay (MPI proposal 2017)			1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Tory	Te Pangu (MPI proposal 2017)			1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Tory	Tio Point (MPI proposal 2017)			1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Option 2: The MPI proposal (illustrating feed discharge if proposal leads to consents being approved for 35 years)		42210	42710	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500	49500
Difference between approved consented and proposed		0	0	-6890	-6890	-6890	-6890	-10890	-10890	-10890	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600	-24600
Cumulative difference		0	0	-6890	-12780	-19670	-25560	-35450	-46340	-56230	-81130	-105930	-130530	-155130	-179730	-204330	-228930	-253530	-278130	-302730	-327330	-351930	-376530	-401130	-425730	-450330	-474930	-499530	-524130	-548730	-573330	-597930	-622530	-647130	-671730	-696330	-720930	-745530	-770130

(C) Maths to support actual numerical figures in text

Additional feed that NZKS applied for	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000
Existing Max feed	28,210	28,710	28,710	28,710	28,710	28,710	24,710	24,710	24,710	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL APPLIED FOR	71,210	71,710	71,710	71,710	71,710	71,710	67,710	67,710	67,710	53,500	53,500	53,500	53,500	53,500	53,500	53,500	53,500	53,500	53,500	53,500	53,500	53,500	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000	43,000
Existing Max feed	31,210	31,710	31,710	31,710	31,710	31,710	31,710	31,710	31,710	24,500	24,500	24,500	24,500	24,500	24,500	24,500	24,500	24,500	24,500	24,500	24,500	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	0	0	0	0
Less the farms the BOI took into account as closed - Crail Bay x 2	-1,210	-1,210	-1,210	-1,210	-1,210	-1,210	-1,210	-1,210	-1,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Actual feed that was approved	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000	19000
TOTAL APPROVED	47,000	47,500	47,500	47,500	47,500	47,500	47,500	47,500	47,500	43,500	43,500	43,500	43,500	43,500	43,500	43,500	43,500	43,500	43,500	43,500	43,500	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	19,000	19,000	19,000	19,000

II: In order of Sound (an exact replica of (a) and (c) above reordered by Sound)

(repeated) (A) Maximum consented feed discharge (source: numbered resource consents for each site)

Sound	Farm	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049
Pelorus	Forsyth UD40412	4000	4000	4000	4000	4000	4000	4000	4000	4000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pelorus	Waihinau MFL456	3000	3000	3000	3000	3000	3000	3000	3000	3000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pelorus	Crail Bay USD6014	1440	1440	1440	1440	1440	1440	1440	1440	1440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pelorus	Crail Bay USD6040	1770	1770	1770	1770	1770	1770	1770	1770	1770	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pelorus	Waitaia USD4294	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
Pelorus	Kopaua USD4295	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
Pelorus Sound		20210	20210	20210	20210	20210	20210	20210	20210	20210	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
																															0	0	0	0	0
Queen	Otanerau UD40217	4000	4000	4000	4000	4000	4000	4000	4000	4000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tory	Te Pangu USD3081	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	0	0	0	0	0	0	0	0	0	0	0	0	0
Queen	Ruataika UD21247	4000	4000	4000	4000	4000	4000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tory	Clay Point USD9246 (changed to USD675 in January 2017)	4000	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	0	0	0	0	0	0	0	0	0	0	0	0	0
Tory	Ngamahau USD5296	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
Queen Charlotte Sound (including Tory Channel)		22000	22500	22500	22500	22500	22500	18500	18500	18500	14500	14500	14500	14500	14500	14500	14500	14500	14500	14500	14500	14500	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
Total Check		42210	42710	42710	42710	42710	42710	38710	38710	38710	24500	24500	24500	24500	24500	24500	24500	24500	24500	24500	24500	24500	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000	14000

(repeated) (B) Maximum consented feed discharge for all NZKS farms (source: current resource consents and MPI Discussion Paper 2017/04, pp. 39 and 84)

Sound	Farm	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Queen	Otanerau UD40217	4000	4000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queen	Ruataika UD21247	4000	4000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL Queen Charlotte Sounds (excl Tory)	8000	8000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pelorus	Forsyth UD40412	4000	4000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pelorus	Waihinau MFL456	3000	3000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pelorus	Crail Bay USD6014	1440	1440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pelorus	Crail Bay USD6040	1770	1770	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pelorus	Waitaia USD4294 (new as of 2012 proposal)	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	0	0	0	0
Pelorus	Kopaua USD4295 (new as of 2012 proposal)	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	0	0	0	0
Pelorus	Blowhole Point North (MPI proposal 2017)			4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500
Pelorus	Blowhole Point South (MPI proposal 2017)			5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000
Pelorus	Waitaia MidChannel (MPI proposal 2017)			7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000
Pelorus	Richmond Bay South (MPI proposal 2017)			5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000
Pelorus	Horseshoe Bay (MPI proposal 2017)			1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Pelorus Sound	TOTAL PELORUS	20210	20210	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	33000	23000	23000	23000	23000
Tory	Clay Point USD9246 (changed to USD675 in January 2017)	4000	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tory	Ngamahau USD5296 (new as of 2012 proposal)	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000