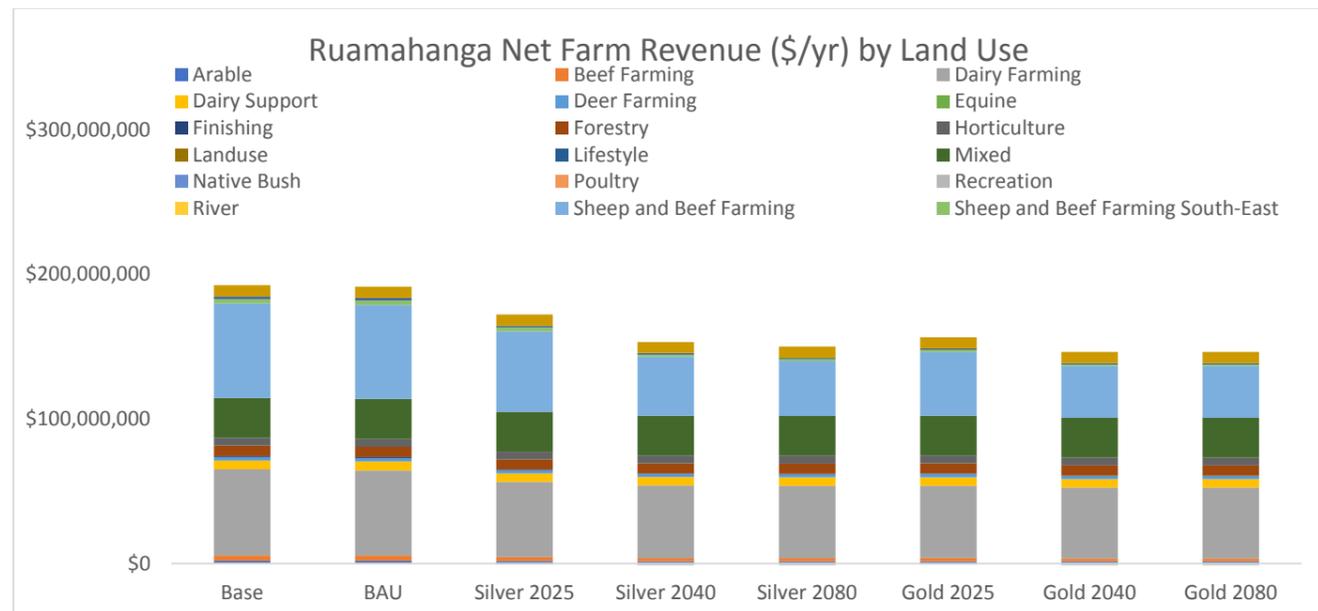


RUAMAHANGA_ONFARMMITIGATION_15NOV17_V1.4

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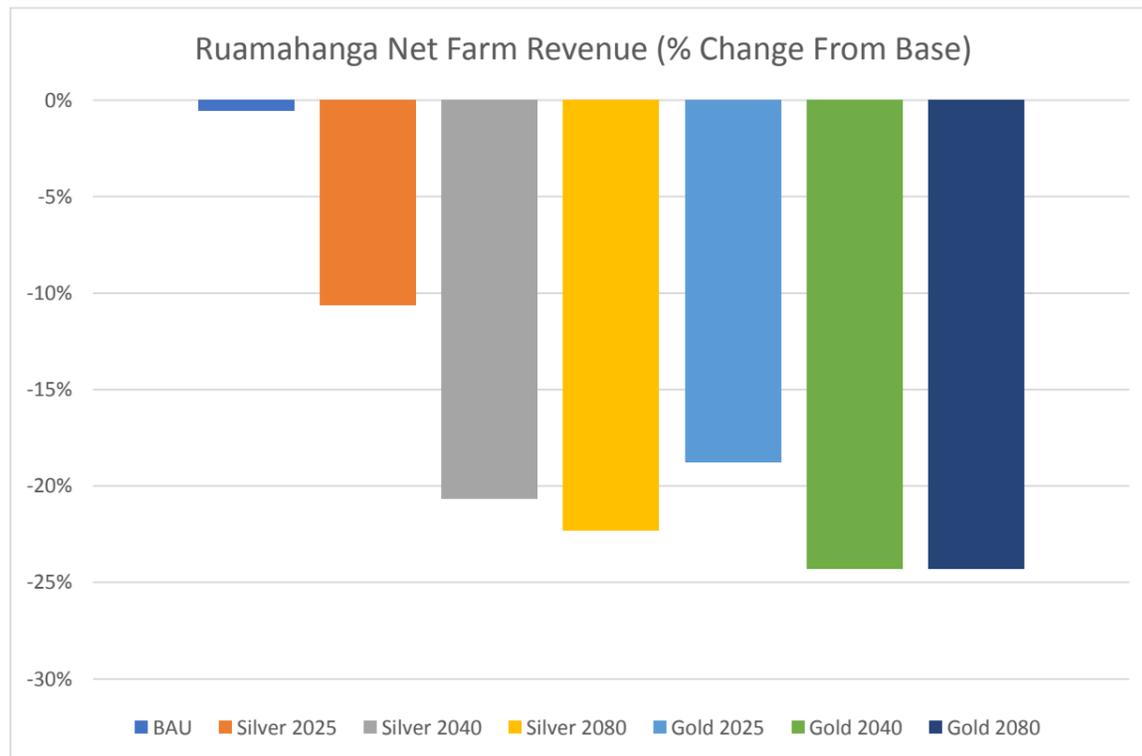
Ruamahanga Net Farm Revenue (\$/yr) by Land Use

	Area	Base	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080
Arable	1,658	\$1,904,611	\$1,904,611	\$1,736,052	\$1,610,411	\$1,611,684	\$1,609,503	\$1,570,163	\$1,570,163
Beef Farming	9,505	\$3,832,390	\$3,832,390	\$2,833,666	\$2,165,520	\$2,262,956	\$2,395,268	\$2,129,106	\$2,129,106
Dairy Farming	30,090	\$59,452,530	\$58,653,607	\$51,981,328	\$50,352,729	\$50,106,431	\$49,964,586	\$48,983,015	\$48,983,015
Dairy Support	10,008	\$6,151,398	\$6,151,398	\$5,805,393	\$5,697,710	\$5,693,283	\$5,787,754	\$5,693,283	\$5,693,283
Deer Farming	2,367	\$2,354,707	\$2,354,707	\$2,138,223	\$2,118,522	\$2,118,522	\$2,131,524	\$2,118,522	\$2,118,522
Equine	384	\$0	\$0	-\$704	-\$1,320	-\$1,320	-\$704	-\$1,320	-\$1,320
Finishing	1,915	\$763,742	\$763,742	\$497,214	\$442,768	\$445,539	\$438,709	\$414,032	\$414,032
Forestry	11,310	\$7,087,498	\$7,087,384	\$7,068,763	\$7,029,840	\$7,029,840	\$7,068,763	\$7,029,840	\$7,029,840
Horticulture	732	\$5,419,367	\$5,419,367	\$5,419,097	\$5,415,734	\$5,415,734	\$5,419,097	\$5,415,734	\$5,415,734
Landuse	60	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lifestyle	12,210	\$0	-\$420	-\$23,678	-\$234,213	-\$234,213	-\$23,670	-\$234,213	-\$234,213
Mixed	16,744	\$27,626,885	\$27,626,692	\$27,559,296	\$27,403,486	\$27,403,486	\$27,479,298	\$27,403,486	\$27,403,486
Native Bush	85,853	\$0	\$0	-\$111,187	-\$133,579	-\$133,579	-\$111,186	-\$133,579	-\$133,579
Poultry	11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Recreation	695	\$0	\$0	-\$590	-\$958	-\$958	-\$590	-\$958	-\$958
River	3,876	\$0	-\$22	-\$12,251	-\$83,186	-\$83,186	-\$12,251	-\$83,186	-\$83,186
Sheep and Beef Farming	142,078	\$65,285,066	\$65,059,046	\$55,624,510	\$40,784,933	\$38,136,900	\$43,827,269	\$35,812,145	\$35,812,145
Sheep and Beef Farming South-East	7,137	\$3,126,016	\$3,070,624	\$2,562,142	\$1,542,562	\$1,280,549	\$1,669,898	\$1,172,508	\$1,172,508
Sheep Farming	4,498	\$1,713,861	\$1,713,859	\$1,147,159	\$868,987	\$804,916	\$922,280	\$732,560	\$732,560
Urban	3,182	\$0	\$0	\$0	-\$2,768	-\$2,768	\$0	-\$2,768	-\$2,768
Utility	4,826	\$0	-\$29	-\$20,497	-\$57,995	-\$57,995	-\$20,497	-\$57,995	-\$57,995
Viticulture	1,620	\$7,785,619	\$7,785,619	\$7,785,619	\$7,782,191	\$7,782,191	\$7,785,426	\$7,782,191	\$7,782,191
Waterway	8,346	\$0	\$0	-\$910	-\$4,961	-\$4,961	-\$910	-\$4,961	-\$4,961
Total	359,103	\$192,503,691	\$191,422,575	\$171,988,644	\$152,696,414	\$149,573,051	\$156,329,566	\$145,737,605	\$145,737,605



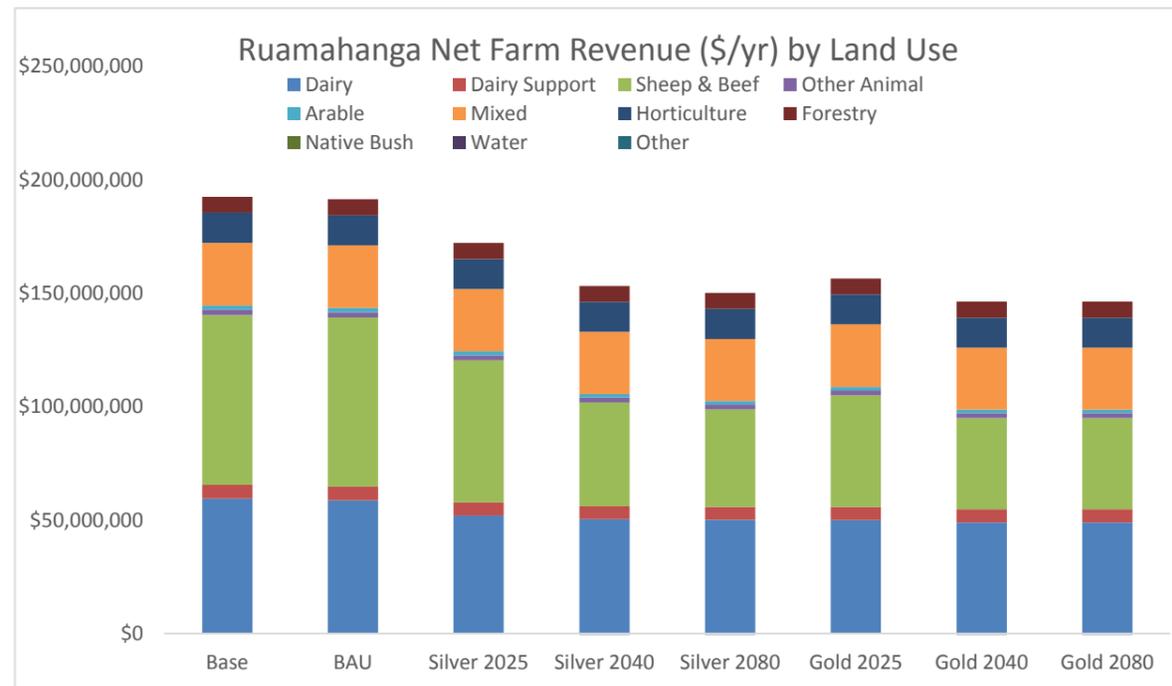
Ruamāhanga Net Farm Revenue (% Change From Base)

	Area	Base	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080
Arable			0%	-9%	-15%	-15%	-15%	-18%	-18%
Beef Farming			0%	-26%	-43%	-41%	-37%	-44%	-44%
Dairy Farming			-1%	-13%	-15%	-16%	-16%	-18%	-18%
Dairy Support			0%	-6%	-7%	-7%	-6%	-7%	-7%
Deer Farming			0%	-9%	-10%	-10%	-9%	-10%	-10%
Equine									
Finishing			0%	-35%	-42%	-42%	-43%	-46%	-46%
Forestry			0%	0%	-1%	-1%	0%	-1%	-1%
Horticulture			0%	0%	0%	0%	0%	0%	0%
Landuse									
Lifestyle									
Mixed			0%	0%	-1%	-1%	-1%	-1%	-1%
Native Bush									
Poultry									
Recreation									
River									
Sheep and Beef Farming			0%	-15%	-38%	-42%	-33%	-45%	-45%
Sheep and Beef Farming South-East			-2%	-18%	-51%	-59%	-47%	-62%	-62%
Sheep Farming			0%	-33%	-49%	-53%	-46%	-57%	-57%
Urban									
Utility									
Viticulture			0%	0%	0%	0%	0%	0%	0%
Waterway									
Total			-1%	-11%	-21%	-22%	-19%	-24%	-24%



Ruamāhanga Net Farm Revenue (\$/yr) by Aggregate Land Use

	Area	Base	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080
Dairy	30,090	\$59,452,530	\$58,653,607	\$51,981,328	\$50,352,729	\$50,106,431	\$49,964,586	\$48,983,015	\$48,983,015
Dairy Support	10,008	\$6,151,398	\$6,151,398	\$5,805,393	\$5,697,710	\$5,693,283	\$5,787,754	\$5,693,283	\$5,693,283
Sheep & Beef	165,132	\$74,721,075	\$74,439,660	\$62,664,690	\$45,804,770	\$42,930,859	\$49,253,425	\$40,260,351	\$40,260,351
Other Animal	2,762	\$2,354,707	\$2,354,707	\$2,137,518	\$2,117,202	\$2,117,202	\$2,130,819	\$2,117,202	\$2,117,202
Arable	1,658	\$1,904,611	\$1,904,611	\$1,736,052	\$1,610,411	\$1,611,684	\$1,609,503	\$1,570,163	\$1,570,163
Mixed	16,744	\$27,626,885	\$27,626,692	\$27,559,296	\$27,403,486	\$27,403,486	\$27,479,298	\$27,403,486	\$27,403,486
Horticulture	2,352	\$13,204,986	\$13,204,986	\$13,204,716	\$13,197,925	\$13,197,925	\$13,204,522	\$13,197,925	\$13,197,925
Forestry	11,310	\$7,087,498	\$7,087,384	\$7,068,763	\$7,029,840	\$7,029,840	\$7,068,763	\$7,029,840	\$7,029,840
Native Bush	85,853	\$0	\$0	-\$111,187	-\$133,579	-\$133,579	-\$111,186	-\$133,579	-\$133,579
Water	12,223	\$0	-\$22	-\$13,161	-\$88,147	-\$88,147	-\$13,161	-\$88,147	-\$88,147
Other	20,972	\$0	-\$449	-\$44,765	-\$295,934	-\$295,934	-\$44,758	-\$295,934	-\$295,934
Total	359,103	\$192,503,691	\$191,422,575	\$171,988,644	\$152,696,414	\$149,573,051	\$156,329,566	\$145,737,605	\$145,737,605



Ruamāhanga Net Farm Revenue (% Change From Base)

		Base	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080
Dairy		\$59,452,530	-1%	-13%	-15%	-16%	-16%	-18%	-18%
Sheep & Beef		\$74,721,075	-0.4%	-16%	-39%	-43%	-34%	-46%	-46%
Other LU		\$58,330,085	0.0%	-2%	-3%	-3%	-2%	-3%	-3%

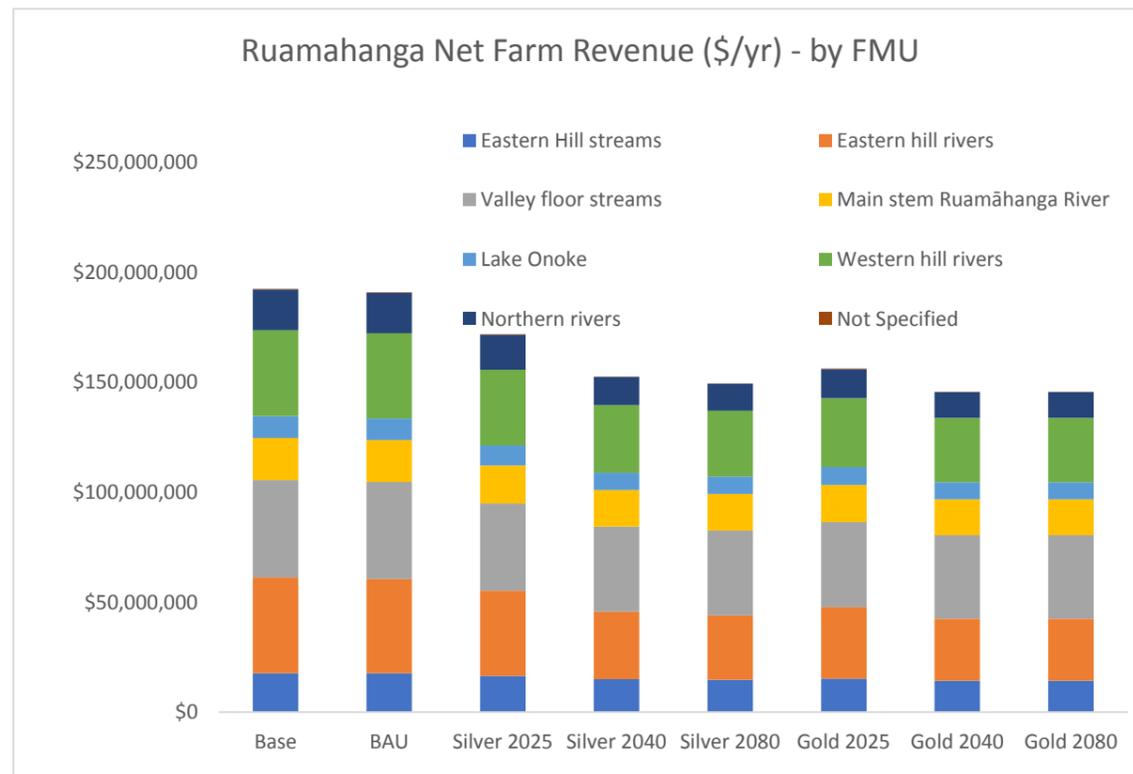
% Total Ruamāhanga Net Farm Revenue by Aggregate Land Use

	Area	Base	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080
Dairy	8%	31%	31%	30%	33%	33%	32%	34%	34%
Dairy Support	3%	3%	3%	3%	4%	4%	4%	4%	4%
Sheep & Beef	46%	39%	39%	36%	30%	29%	32%	28%	28%
Other Animal	1%	1%	1%	1%	1%	1%	1%	1%	1%
Arable	0%	1%	1%	1%	1%	1%	1%	1%	1%
Mixed	5%	14%	14%	16%	18%	18%	18%	19%	19%
Horticulture	1%	7%	7%	8%	9%	9%	8%	9%	9%
Forestry	3%	4%	4%	4%	5%	5%	5%	5%	5%
Native Bush	24%	0%	0%	0%	0%	0%	0%	0%	0%
Water	3%	0%	0%	0%	0%	0%	0%	0%	0%
Other	6%	0%	0%	0%	0%	0%	0%	0%	0%
Total	100%								

NETREV-FMU

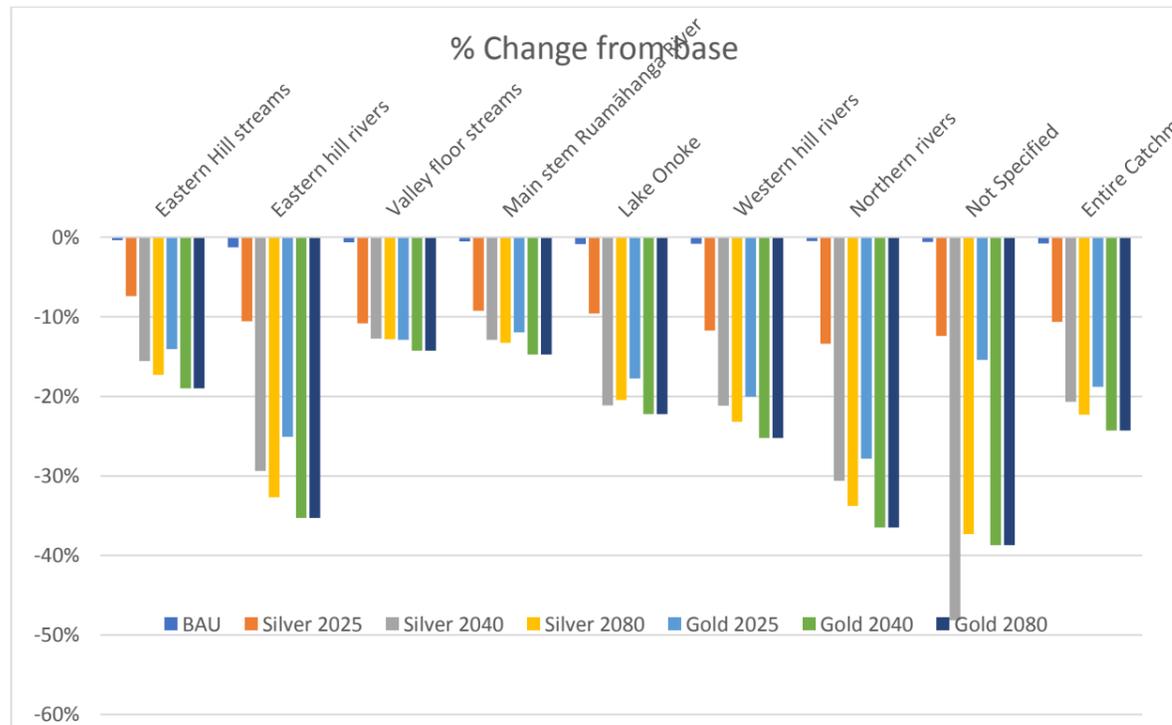
Ruamāhanga Net Farm Revenue (\$/yr) - by FMU

	Area	Base	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080	Base % of total
Eastern Hill streams	20,395	\$17,762,434	\$17,693,336	\$16,447,623	\$14,999,305	\$14,686,760	\$15,262,542	\$14,385,192	\$14,385,192	9%
Eastern hill rivers	86,490	\$43,489,735	\$42,933,126	\$38,898,341	\$30,715,794	\$29,273,102	\$32,574,416	\$28,139,227	\$28,139,227	23%
Valley floor streams	46,034	\$44,296,246	\$44,004,663	\$39,491,782	\$38,642,379	\$38,618,813	\$38,588,897	\$37,976,852	\$37,976,852	23%
Main stem Ruamāhanga River	16,945	\$19,150,596	\$19,052,964	\$17,380,897	\$16,680,105	\$16,605,509	\$16,863,288	\$16,324,223	\$16,324,223	10%
Lake Onoke	23,824	\$9,986,256	\$9,900,720	\$9,026,858	\$7,876,352	\$7,943,184	\$8,211,659	\$7,767,209	\$7,767,209	5%
Western hill rivers	127,647	\$39,053,737	\$38,730,143	\$34,474,425	\$30,781,762	\$29,988,146	\$31,229,024	\$29,192,102	\$29,192,102	20%
Northern rivers	35,146	\$18,420,874	\$18,331,252	\$15,954,263	\$12,782,113	\$12,201,634	\$13,295,677	\$11,701,720	\$11,701,720	10%
Not Specified	2,623	\$343,813	\$341,788	\$301,131	\$178,257	\$215,555	\$290,737	\$210,734	\$210,734	0%
Entire Catchment	359,103	\$192,503,691	\$190,987,992	\$171,975,319	\$152,656,067	\$149,532,704	\$156,316,242	\$145,697,259	\$145,697,259	



% Change from base

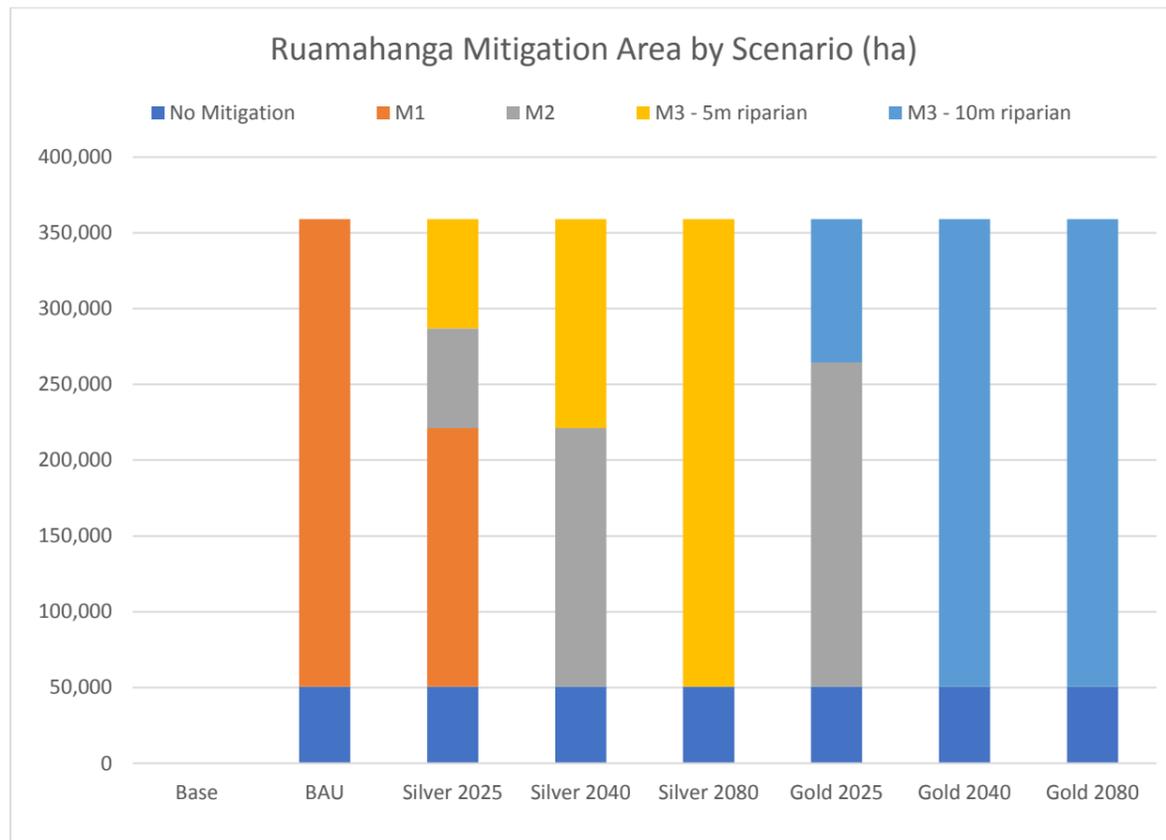
FMU	Area	Base	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080
Eastern Hill streams			0%	-7%	-16%	-17%	-14%	-19%	-19%
Eastern hill rivers			-1%	-11%	-29%	-33%	-25%	-35%	-35%
Valley floor streams			-1%	-11%	-13%	-13%	-13%	-14%	-14%
Main stem Ruamāhanga River			-1%	-9%	-13%	-13%	-12%	-15%	-15%
Lake Onoke			-1%	-10%	-21%	-20%	-18%	-22%	-22%
Western hill rivers			-1%	-12%	-21%	-23%	-20%	-25%	-25%
Northern rivers			0%	-13%	-31%	-34%	-28%	-36%	-36%
Not Specified			-1%	-12%	-48%	-37%	-15%	-39%	-39%
Entire Catchment			-1%	-11%	-21%	-22%	-19%	-24%	-24%



MITIGATION AREA

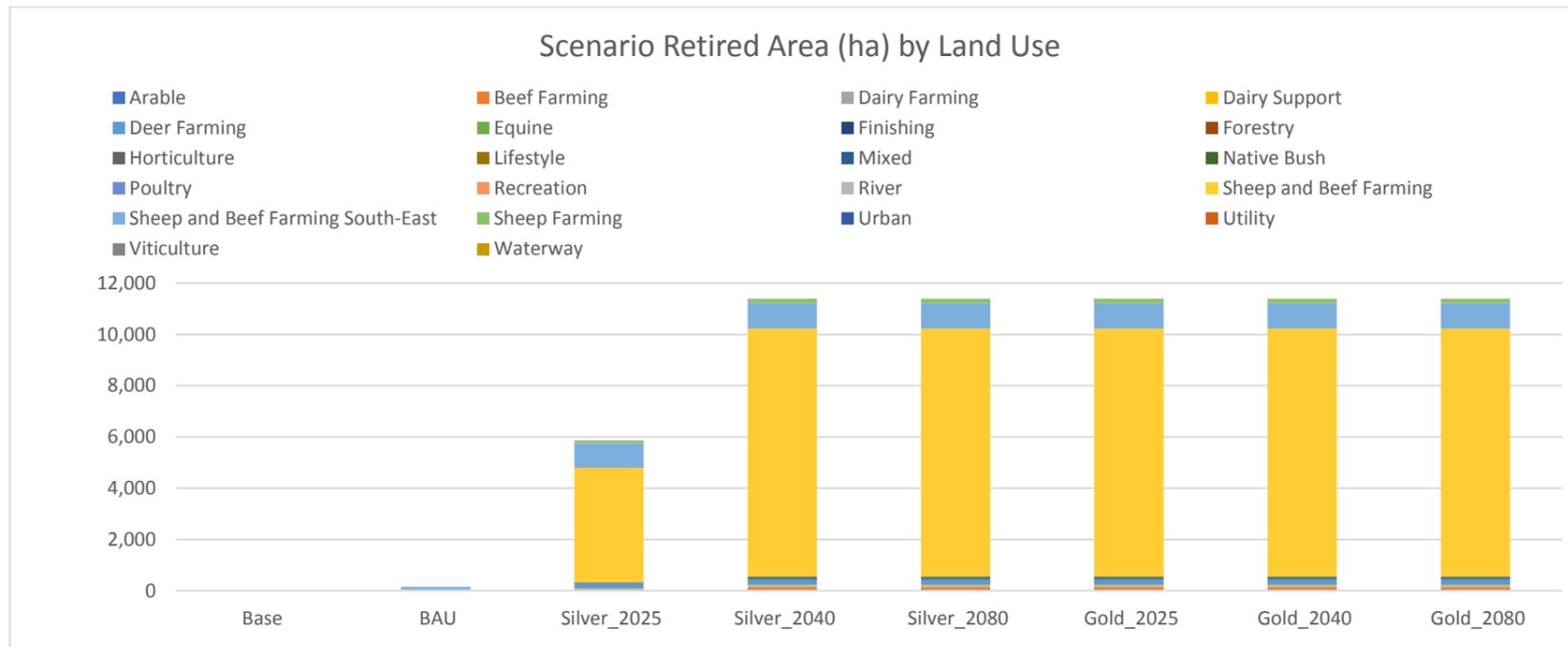
Ruamāhanga Mitigation Area by Scenario (ha)

	Base	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080
No Mitigation	0	50,499	50,499	50,499	50,499	50,499	50,499	50,499
M1	0	308,603	170,722	0	0	0	0	0
M2	0	0	65,849	170,722	0	214,013	0	0
M3 - 5m riparian	0	0	72,032	137,881	308,603	0	0	0
M3 - 10m riparian	0	0	0	0	0	94,590	308,603	308,603
Total	0	359,103						



Scenario Retired Area (ha) by Land Use

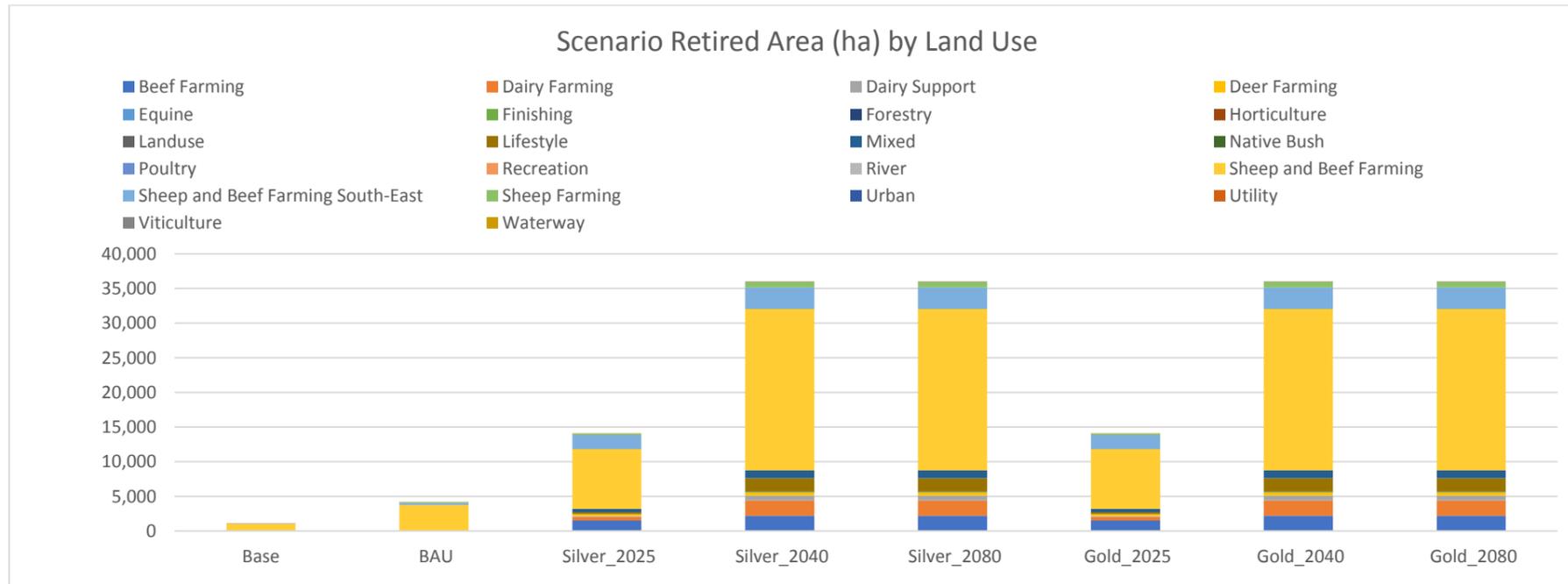
Land Use	Base	BAU	Silver_2025	Silver_2040	Silver_2080	Gold_2025	Gold_2040	Gold_2080
Arable	0	0	4	19	19	19	19	19
Beef Farming	0	0	46	129	129	129	129	129
Dairy Farming	0	0	32	45	45	45	45	45
Dairy Support	0	0	7	28	28	28	28	28
Deer Farming	0	0	201	208	208	208	208	208
Equine	0	0	0	0	0	0	0	0
Finishing	0	0	15	33	33	33	33	33
Forestry	0	0	0	0	0	0	0	0
Horticulture	0	0	0	0	0	0	0	0
Lifestyle	0	0	18	26	26	26	26	26
Mixed	0	0	3	52	52	52	52	52
Native Bush	0	0	0	0	0	0	0	0
Poultry	0	0	0	0	0	0	0	0
Recreation	0	0	0	0	0	0	0	0
River	0	0	0	0	0	0	0	0
Sheep and Beef Farming	0	39	4,476	9,687	9,687	9,687	9,687	9,687
Sheep and Beef Farming South-East	0	108	952	996	996	996	996	996
Sheep Farming	0	0	113	155	155	155	155	155
Urban	0	0	0	0	0	0	0	0
Utility	0	0	0	0	0	0	0	0
Viticulture	0	0	0	0	0	0	0	0
Waterway	0	0	0	0	0	0	0	0
Grand Total	0	148	5,867	11,379	11,379	11,379	11,379	11,379



Scenario Pole Planting Area (ha) by Land Use

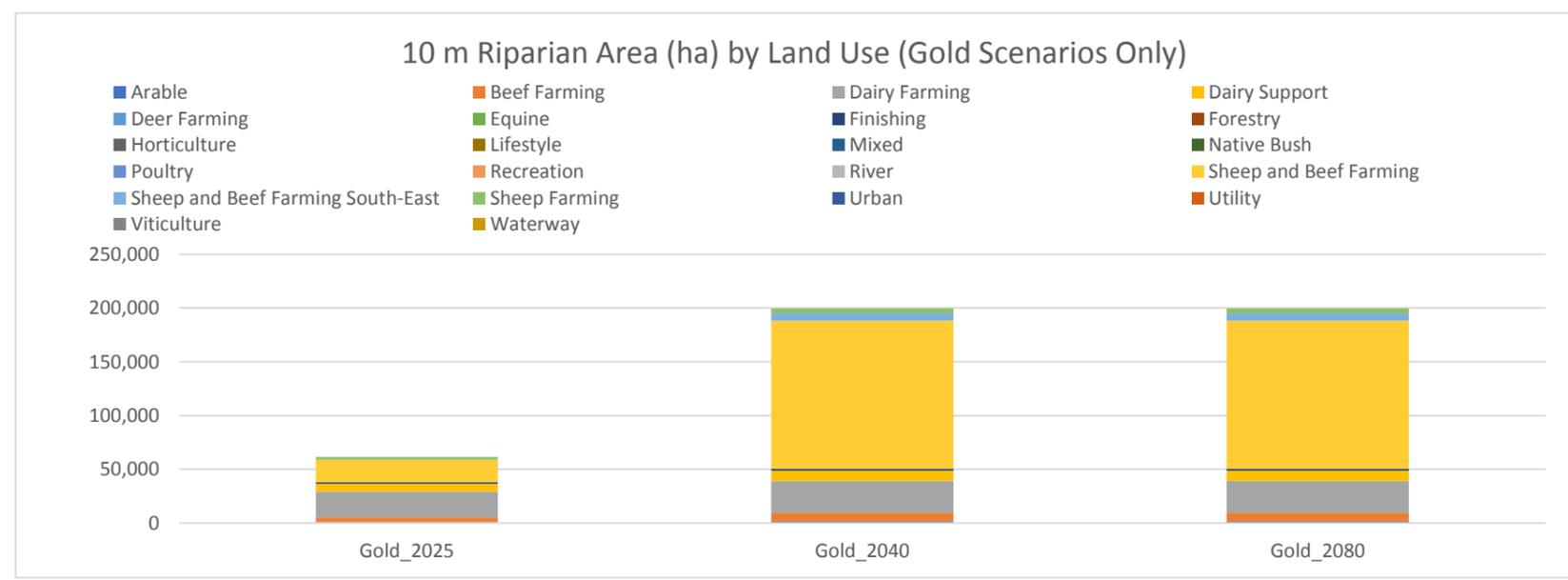
	Base	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080
Arable	0	0	0	2	2	0	2	2
Beef Farming	0	45	1,528	2,210	2,210	1,528	2,210	2,210
Dairy Farming	0	0	529	2,208	2,208	529	2,208	2,208
Dairy Support	0	0	105	703	703	105	703	703
Deer Farming	0	0	298	454	454	298	454	454
Equine	0	0	7	13	13	7	13	13
Finishing	0	0	0	95	95	0	95	95
Forestry	1	2	1	1	1	1	1	1
Horticulture	0	0	0	40	40	0	40	40
Landuse	0	0	0	0	0	0	0	0
Lifestyle	3	6	241	1,887	1,887	241	1,887	1,887
Mixed	1	3	488	1,135	1,135	488	1,135	1,135
Native Bush	0	0	0	0	0	0	0	0
Poultry	0	0	0	0	0	0	0	0
Recreation	0	0	0	0	0	0	0	0
River	0	0	0	0	0	0	0	0
Sheep and Beef Farming	1,027	3,723	8,620	23,324	23,324	8,620	23,324	23,324
Sheep and Beef Farming South-East	56	305	2,028	3,090	3,090	2,033	3,090	3,090
Sheep Farming	0	97	221	776	776	221	776	776
Urban	0	0	0	0	0	0	0	0
Utility	0	0	0	0	0	0	0	0
Viticulture	0	0	0	31	31	0	31	31
Waterway	0	0	0	0	0	0	0	0
Grand Total	1,089	4,182	14,065	35,970	35,970	14,070	35,970	35,970

Scenario Retired Area (ha) by Land Use



10 m Riparian Area (ha) by Land Use (Gold Scenarios Only)

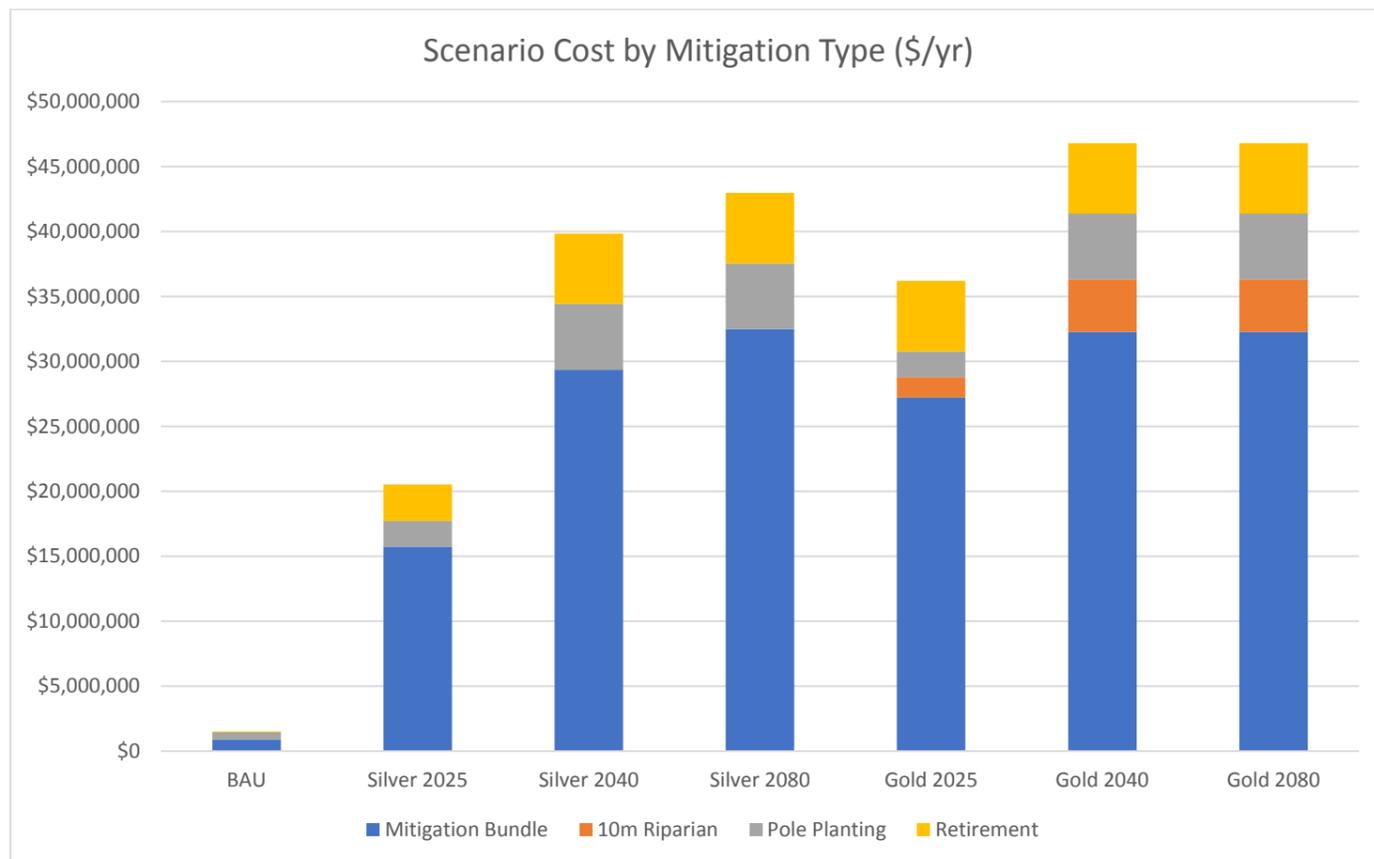
Land Use	Adjusted to account for implementation only on areas with quantified reductions in N and P		
	Gold_2025	Gold_2040	Gold_2080
Arable	811	1,551	1,551
Beef Farming	4,369	8,022	8,022
Dairy Farming	23,880	29,723	29,723
Dairy Support	7,501	9,451	9,451
Deer Farming	0	0	0
Equine	0	0	0
Finishing	1,596	1,849	1,849
Forestry	0	0	0
Horticulture	0	0	0
Lifestyle	0	0	0
Mixed	0	0	0
Native Bush	0	0	0
Poultry	0	0	0
Recreation	0	0	0
River	0	0	0
Sheep and Beef Farming	20,841	137,519	137,519
Sheep and Beef Farming South-East	46	7,039	7,039
Sheep Farming	2,475	4,492	4,492
Urban	0	0	0
Utility	0	0	0
Viticulture	0	0	0
Waterway	0	0	0
Total	61,519	199,646	199,646



MITIGATION COST

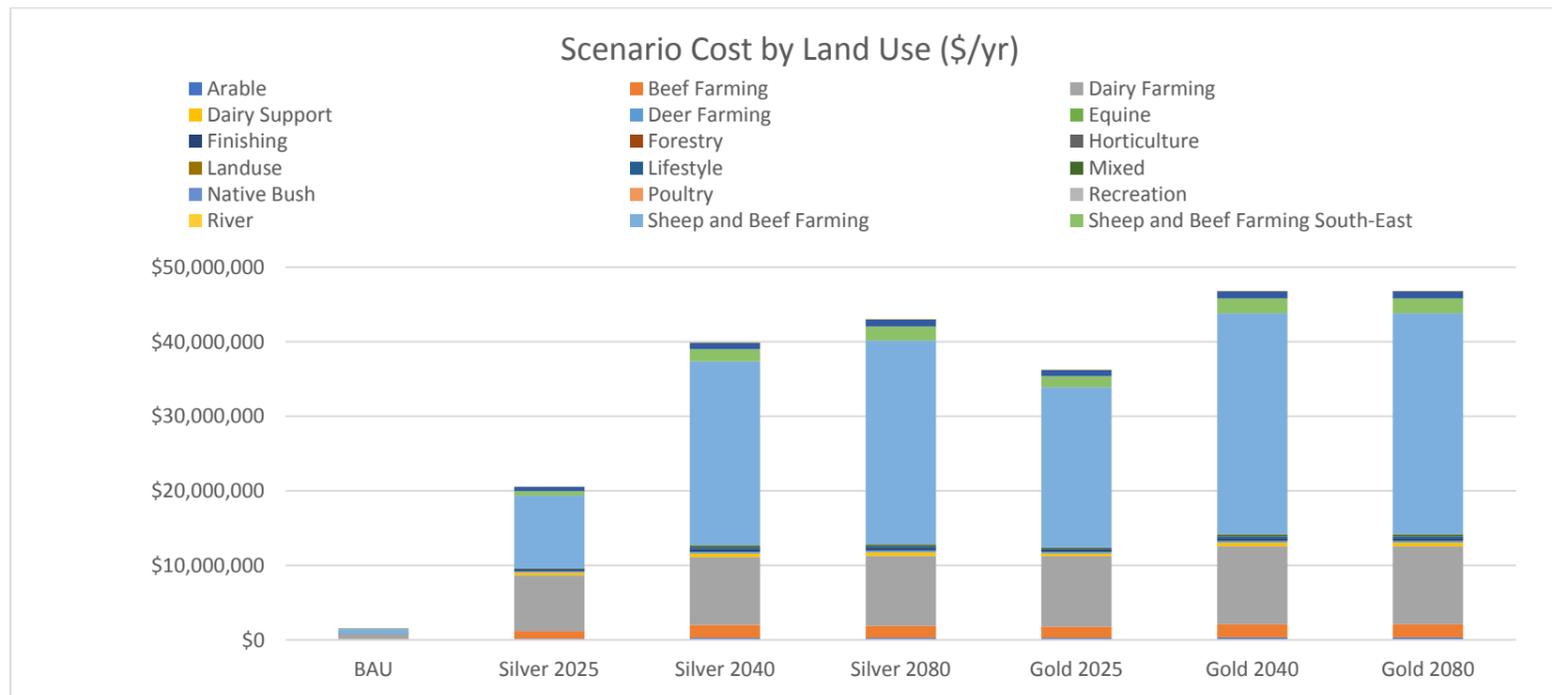
Scenario Cost by Mitigation Type (\$/yr)

	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080
Mitigation Bundle	\$862,613	\$15,732,253	\$29,359,239	\$32,482,603	\$27,230,802	\$32,267,284	\$32,267,284
10m Riparian	\$0	\$0	\$0	\$0	\$1,546,389	\$4,050,764	\$4,050,764
Pole Planting	\$587,614	\$1,976,389	\$5,054,403	\$5,054,403	\$1,977,048	\$5,054,403	\$5,054,403
Retirement	\$65,473	\$2,819,730	\$5,433,982	\$5,433,982	\$5,433,870	\$5,433,982	\$5,433,982
Total	\$1,515,699	\$20,528,372	\$39,847,624	\$42,970,987	\$36,188,109	\$46,806,432	\$46,806,432



Scenario Cost by Land Use (\$/yr)

	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080
Arable	\$0	\$168,540	\$293,400	\$292,126	\$295,088	\$333,647	\$333,647
Beef Farming	\$6,383	\$1,021,986	\$1,707,774	\$1,610,338	\$1,460,383	\$1,744,188	\$1,744,188
Dairy Farming	\$798,924	\$7,488,039	\$9,136,179	\$9,382,477	\$9,504,781	\$10,505,893	\$10,505,893
Dairy Support	\$0	\$349,266	\$463,547	\$467,974	\$366,905	\$467,974	\$467,974
Deer Farming	\$0	\$217,329	\$242,130	\$242,130	\$224,028	\$242,130	\$242,130
Equine	\$0	\$967	\$1,889	\$1,889	\$967	\$1,889	\$1,889
Finishing	\$0	\$266,150	\$322,947	\$320,176	\$324,654	\$351,684	\$351,684
Forestry	\$227	\$105	\$106	\$106	\$105	\$106	\$106
Horticulture	\$0	\$0	\$5,592	\$5,592	\$0	\$5,592	\$5,592
Landuse	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lifestyle	\$843	\$33,680	\$264,800	\$264,800	\$33,673	\$264,800	\$264,800
Mixed	\$386	\$73,930	\$244,563	\$244,563	\$153,928	\$244,563	\$244,563
Native Bush	\$0	\$1	\$1	\$1	\$1	\$1	\$1
Poultry	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Recreation	\$0	\$0	\$0	\$0	\$0	\$0	\$0
River	\$45	\$22	\$22	\$22	\$22	\$22	\$22
Sheep and Beef Farming	\$604,824	\$9,753,158	\$24,674,607	\$27,322,641	\$21,550,399	\$29,647,395	\$29,647,395
Sheep and Beef Farming South-East	\$90,331	\$587,531	\$1,630,863	\$1,892,877	\$1,480,434	\$2,000,917	\$2,000,917
Sheep Farming	\$13,678	\$567,639	\$854,566	\$918,638	\$792,518	\$990,993	\$990,993
Urban	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Utility	\$58	\$29	\$40	\$40	\$29	\$40	\$40
Viticulture	\$0	\$0	\$4,596	\$4,596	\$194	\$4,596	\$4,596
Waterway	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Grand Total	\$1,515,699	\$20,528,372	\$39,847,624	\$42,970,987	\$36,188,109	\$46,806,432	\$46,806,432



Scenario Cost by Land Use (\$/yr)

	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080
Dairy	\$798,924	\$7,488,039	\$9,136,179	\$9,382,477	\$9,504,781	\$10,505,893	\$10,505,893
Sheep & Beef	\$715,216	\$12,196,464	\$29,190,759	\$32,064,670	\$25,608,388	\$34,735,178	\$34,735,178
Other LU	\$1,559	\$843,869	\$1,520,686	\$1,523,840	\$1,074,940	\$1,565,361	\$1,565,361
Total	\$1,515,699	\$20,528,372	\$39,847,624	\$42,970,987	\$36,188,109	\$46,806,432	\$46,806,432

Scenario Cost by Land Use (\$/yr/ha)

	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080	Hectares
Arable	\$0	\$102	\$177	\$176	\$178	\$201	\$201	1,658
Beef Farming	\$1	\$108	\$180	\$169	\$154	\$184	\$184	9,505
Dairy Farming	\$27	\$249	\$304	\$312	\$316	\$349	\$349	30,090
Dairy Support	\$0	\$35	\$46	\$47	\$37	\$47	\$47	10,008
Deer Farming	\$0	\$92	\$102	\$102	\$95	\$102	\$102	2,367
Equine	\$0	\$3	\$5	\$5	\$3	\$5	\$5	384
Finishing	\$0	\$139	\$169	\$167	\$170	\$184	\$184	1,915
Forestry	\$0	\$0	\$0	\$0	\$0	\$0	\$0	11,310
Horticulture	\$0	\$0	\$8	\$8	\$0	\$8	\$8	732
Landuse	\$0	\$0	\$0	\$0	\$0	\$0	\$0	60
Lifestyle	\$0	\$3	\$22	\$22	\$3	\$22	\$22	12,210
Mixed	\$0	\$4	\$15	\$15	\$9	\$15	\$15	16,744
Native Bush	\$0	\$0	\$0	\$0	\$0	\$0	\$0	85,853
Poultry	\$0	\$0	\$0	\$0	\$0	\$0	\$0	11
Recreation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	695
River	\$0	\$0	\$0	\$0	\$0	\$0	\$0	3,876
Sheep and Beef Farming	\$4	\$69	\$174	\$192	\$152	\$209	\$209	142,078
Sheep and Beef Farming South-East	\$13	\$82	\$229	\$265	\$207	\$280	\$280	7,137
Sheep Farming	\$3	\$126	\$190	\$204	\$176	\$220	\$220	4,498
Urban	\$0	\$0	\$0	\$0	\$0	\$0	\$0	3,182
Utility	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4,826
Viticulture	\$0	\$0	\$3	\$3	\$0	\$3	\$3	1,620
Waterway	\$0	\$0	\$0	\$0	\$0	\$0	\$0	8,346
Grand Total	\$4	\$57	\$111	\$120	\$101	\$130	\$130	359,103

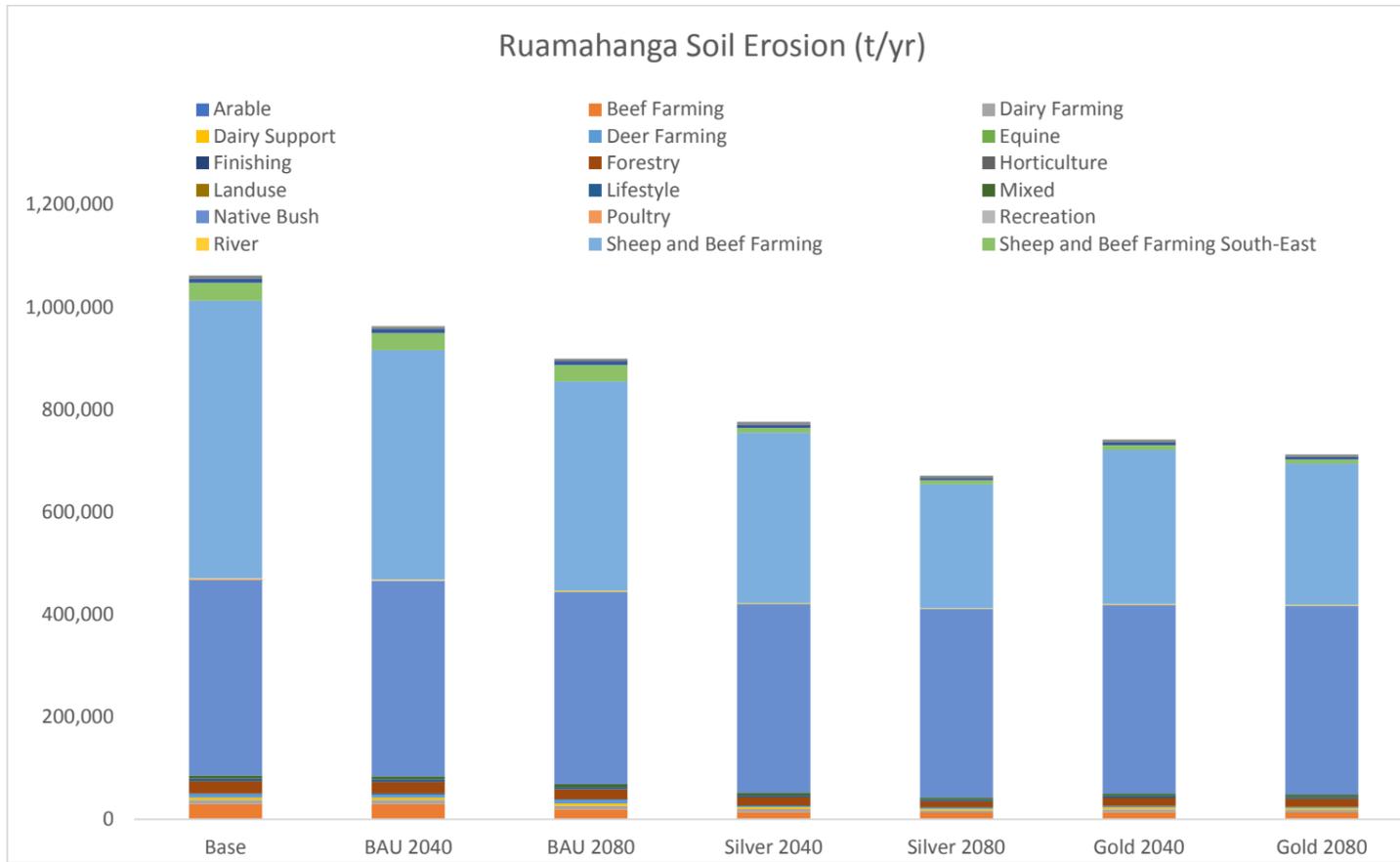
Scenario Cost by Land Use (\$/yr/ha)

	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080
Dairy	\$27	\$249	\$304	\$312	\$316	\$349	\$349
Sheep & Beef	\$4	\$74	\$177	\$194	\$155	\$210	\$210
Other LU	\$0	\$5	\$9	\$9	\$7	\$10	\$10
Total	\$4	\$57	\$111	\$120	\$101	\$130	\$130

ENV OUTPUTS

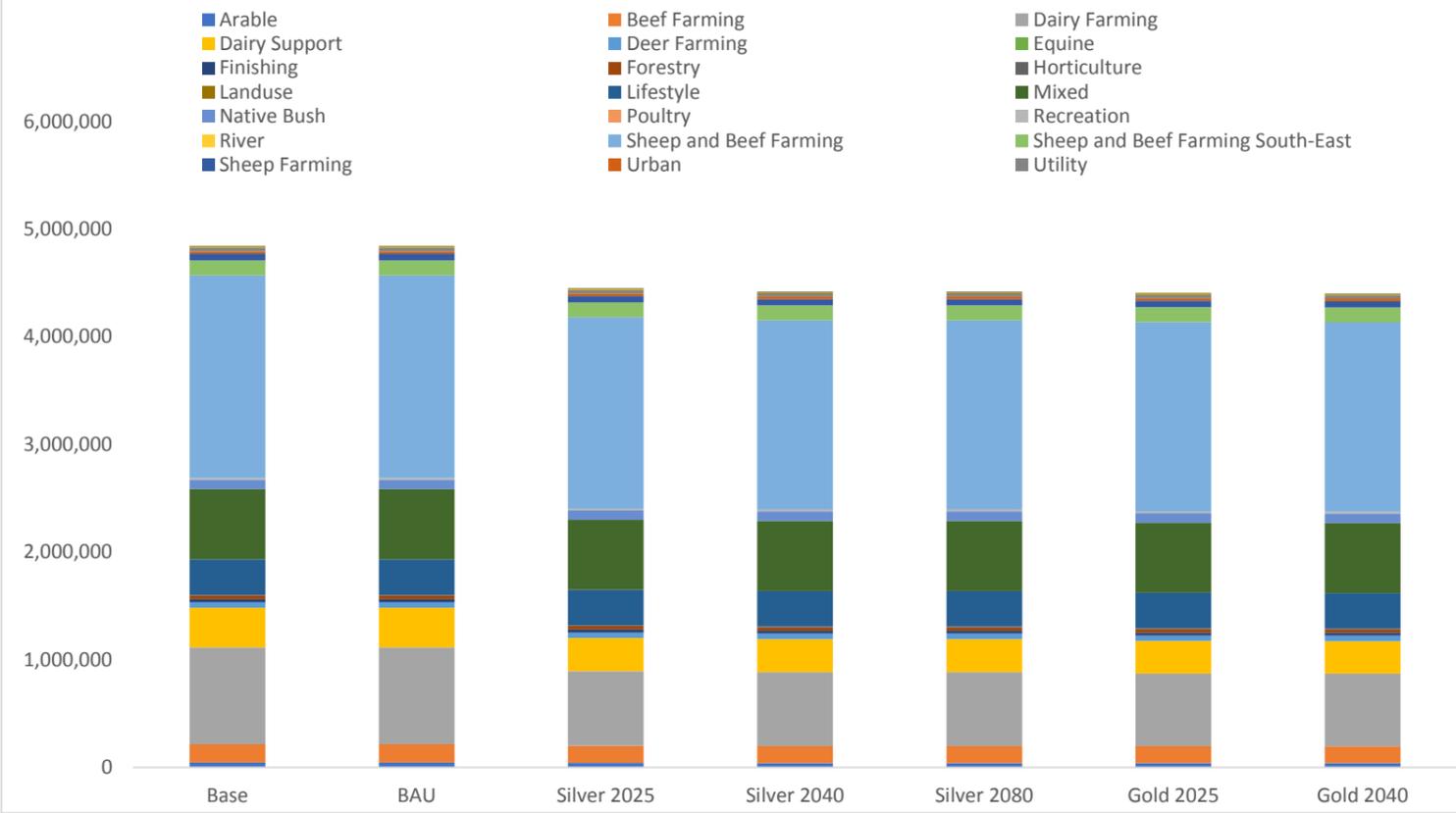
Ruamāhanga Soil Erosion (t/yr)

	Area	Base	BAU 2040	BAU 2080	Silver 2040	Silver 2080	Gold 2040	Gold 2080
Arable	1,658	1,757	1,756	1,756	1,721	1,589	1,591	1,591
Beef Farming	9,505	27,819	27,812	17,985	12,797	11,413	12,049	11,721
Dairy Farming	30,090	8,048	8,048	6,698	5,909	4,925	5,806	5,203
Dairy Support	10,008	4,762	4,761	4,761	3,503	2,958	3,383	3,034
Deer Farming	2,367	7,053	7,053	6,888	2,567	1,940	2,526	2,273
Equine	384	62	61	61	61	60	61	60
Finishing	1,915	1,323	1,323	1,323	1,134	939	941	940
Forestry	11,310	24,065	22,539	19,148	15,521	11,739	15,507	15,488
Horticulture	732	14	14	14	14	13	14	14
Landuse	60	93	93	93	93	28	93	93
Lifestyle	12,210	4,778	4,675	4,332	3,764	3,329	3,714	3,593
Mixed	16,744	6,205	5,844	5,629	4,825	4,058	4,395	4,346
Native Bush	85,853	381,679	381,572	374,759	368,185	367,528	368,197	368,195
Poultry	11	0	0	0	0	0	0	0
Recreation	695	1,542	1,542	1,542	522	521	522	522
River	3,876	1,540	1,523	1,522	1,499	1,478	1,498	1,491
Sheep and Beef Farming	142,078	541,570	447,412	408,647	332,642	241,337	300,916	275,972
Sheep and Beef Farming South-East	7,137	35,174	33,087	31,835	9,205	7,908	9,019	8,184
Sheep Farming	4,498	8,547	8,546	7,225	6,714	4,053	6,349	4,839
Urban	3,182	249	248	248	248	210	248	248
Utility	4,826	4,109	4,067	4,042	3,909	3,795	3,885	3,859
Viticulture	1,620	100	100	100	100	98	100	100
Waterway	8,346	102	102	102	53	40	53	53
Total	359,103	1,060,591	962,181	898,711	774,987	669,959	740,866	711,817
% Change From Base			-9.3%	-15.3%	-26.9%	-36.8%	-30.1%	-32.9%



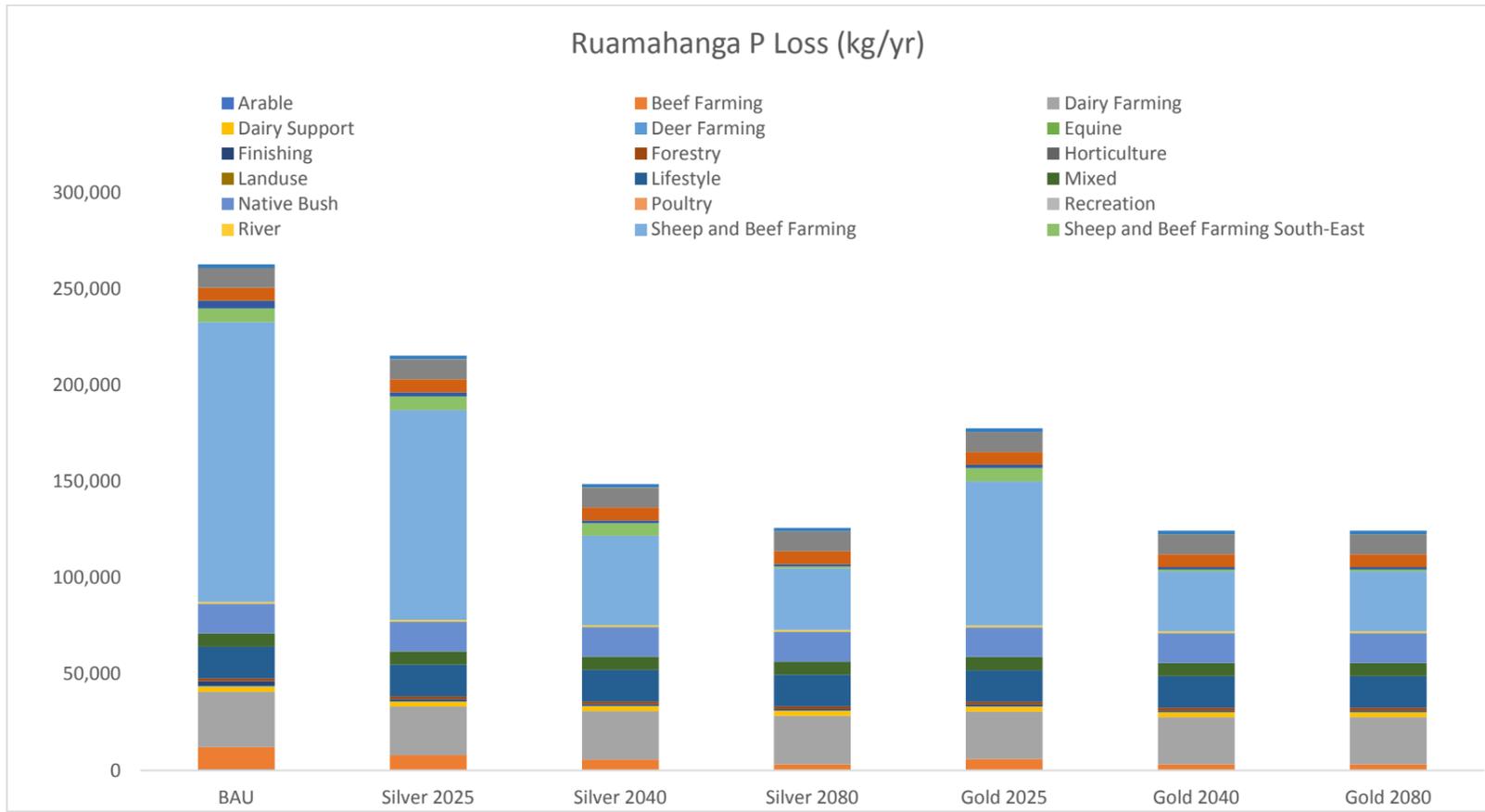
Ruamahanga N Loss (kg/yr)									
	Area	Base	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080
Arable	1,658	46,598	46,598	42,135	41,380	41,370	40,767	40,570	40,570
Beef Farming	9,505	168,630	168,630	159,014	156,351	156,349	156,250	156,090	156,090
Dairy Farming	30,090	900,217	900,217	693,138	688,308	688,381	675,829	675,387	675,387
Dairy Support	10,008	368,101	368,101	307,893	305,868	305,776	301,715	301,034	301,034
Deer Farming	2,367	49,697	49,697	49,697	49,697	49,697	49,697	49,697	49,697
Equine	384	0	0	0	0	0	0	0	0
Finishing	1,915	29,511	29,511	27,928	27,884	27,884	27,815	27,747	27,747
Forestry	11,310	33,931	33,931	33,931	33,931	33,931	33,931	33,931	33,931
Horticulture	732	5,122	5,122	5,122	5,122	5,122	5,122	5,122	5,122
Landuse	60	0	0	0	0	0	0	0	0
Lifestyle	12,210	329,659	329,659	329,658	329,658	329,658	329,658	329,658	329,658
Mixed	16,744	652,980	652,980	652,977	652,977	652,977	652,977	652,977	652,977
Native Bush	85,853	85,853	85,853	85,853	85,853	85,853	85,853	85,853	85,853
Poultry	11	0	0	0	0	0	0	0	0
Recreation	695	18,076	18,076	18,076	18,076	18,076	18,076	18,076	18,076
River	3,876	0	0	0	0	0	0	0	0
Sheep and Beef Farming	142,078	1,880,983	1,880,983	1,776,007	1,756,653	1,756,710	1,758,702	1,756,511	1,756,511
Sheep and Beef Farming South-East	7,137	138,756	138,756	138,756	138,756	138,756	138,756	138,756	138,756
Sheep Farming	4,498	64,544	64,544	60,205	59,613	59,613	59,556	59,478	59,478
Urban	3,182	22,274	22,274	22,274	22,274	22,274	22,274	22,274	22,274
Utility	4,826	33,782	33,782	33,782	33,782	33,782	33,782	33,782	33,782
Viticulture	1,620	14,583	14,583	14,583	14,583	14,583	14,583	14,583	14,583
Waterway	8,346	5	5	3	3	3	3	3	3
Total	359,103	4,843,302	4,843,302	4,451,033	4,420,769	4,420,795	4,405,347	4,401,530	4,401,530
% Change From Base			0.0%	-8.1%	-8.7%	-8.7%	-9.0%	-9.1%	-9.1%

Ruamahanga N Loss (kg/yr)



Ruamahanga P Loss (kg/yr)

	Area	Base	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080
Arable	1,658	610	610	537	526	526	526	526	526
Beef Farming	9,505	11,509	11,509	7,418	5,177	2,705	5,487	2,645	2,645
Dairy Farming	30,090	28,708	28,708	25,241	25,217	25,210	24,638	24,604	24,604
Dairy Support	10,008	2,634	2,634	2,403	2,396	2,396	2,372	2,372	2,372
Deer Farming	2,367	237	237	237	237	237	237	237	237
Equine	384	92	92	92	92	92	92	92	92
Finishing	1,915	2,638	2,638	1,127	667	649	819	614	614
Forestry	11,310	1,470	1,470	1,470	1,470	1,470	1,470	1,470	1,470
Horticulture	732	29	29	29	29	29	29	29	29
Landuse	60	0	0	0	0	0	0	0	0
Lifestyle	12,210	16,361	16,361	16,361	16,361	16,361	16,361	16,361	16,361
Mixed	16,744	6,865	6,865	6,865	6,865	6,865	6,865	6,865	6,865
Native Bush	85,853	15,453	15,453	15,453	15,453	15,453	15,453	15,453	15,453
Poultry	11	0	0	0	0	0	0	0	0
Recreation	695	56	56	56	56	56	56	56	56
River	3,876	853	853	853	853	853	853	853	853
Sheep and Beef Farming	142,078	145,234	145,234	109,008	46,536	31,912	74,895	31,136	31,136
Sheep and Beef Farming South-East	7,137	7,087	7,087	7,076	6,410	1,062	6,841	1,062	1,062
Sheep Farming	4,498	4,013	4,013	2,156	1,484	1,204	1,691	1,176	1,176
Urban	3,182	6,746	6,746	6,746	6,746	6,746	6,746	6,746	6,746
Utility	4,826	10,231	10,231	10,231	10,231	10,231	10,231	10,231	10,231
Viticulture	1,620	65	65	65	65	65	65	65	65
Waterway	8,346	1,836	1,836	1,836	1,836	1,836	1,836	1,836	1,836
Total	359,103	262,726	262,726	215,260	148,706	125,958	177,562	124,429	124,429
% Change From Base			0.0%	-18.1%	-43.4%	-52.1%	-32.4%	-52.6%	-52.6%



REG ECONOMY

Summary of Ruamāhanga Regional Economic Impacts

Land Use	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080
<i>Change Farm Gate Revenue from Baseline (Mil \$/yr)</i>							
Dairy	\$0.00	-\$4.25	-\$6.67	-\$7.36	-\$7.54	-\$9.56	-\$9.56
Sheep, Beef, Dairy Support and Grains	-\$0.84	-\$7.82	-\$15.97	-\$16.75	-\$16.85	-\$18.81	-\$18.81
Total	-\$0.85	-\$12.08	-\$22.64	-\$24.11	-\$24.39	-\$28.37	-\$28.37
<i>Change in Regional Economic Output from Baseline (Mil \$/yr)</i>							
Dairy	-\$0.01	-\$6.80	-\$10.65	-\$11.75	-\$12.04	-\$15.27	-\$15.27
Sheep, Beef, Dairy Support and Grains	-\$1.32	-\$12.21	-\$24.93	-\$26.16	-\$26.31	-\$29.38	-\$29.38
Total	-\$1.32	-\$19.01	-\$35.58	-\$37.91	-\$38.36	-\$44.64	-\$44.64
<i>Change in Regional Employment from Baseline (FTE)</i>							
Dairy	0.0	-33.0	-51.6	-56.9	-58.4	-74.0	-74.0
Sheep, Beef, Dairy Support and Grains	-5.9	-54.8	-111.9	-117.5	-118.1	-132.0	-132.0
Total	-5.9	-87.8	-163.5	-174.4	-176.5	-206.0	-206.0

Breakdown of Lost Farm Gate Revenue by Mitigation Bundles and Retired Land

Land Use	BAU	Silver 2025	Silver 2040	Silver 2080	Gold 2025	Gold 2040	Gold 2080
<i>Change Farm Gate Revenue From Baseline due to Mitigation Bundles (Mil \$/yr)</i>							
Dairy	\$0.00	-\$3.57	-\$5.37	-\$6.07	-\$6.24	-\$8.27	-\$8.27
Sheep, Beef, Dairy Support and Grains	\$0.00	-\$3.00	-\$6.57	-\$7.35	-\$7.46	-\$9.42	-\$9.42
Total	\$0.00	-\$6.57	-\$11.94	-\$13.42	-\$13.70	-\$17.68	-\$17.68
<i>Change Farm Gate Revenue From Baseline due to Retired Land (Mil \$/yr)</i>							
Dairy	\$0.00	-\$0.69	-\$1.30	-\$1.30	-\$1.30	-\$1.30	-\$1.30
Sheep, Beef, Dairy Support and Grains	-\$0.84	-\$4.82	-\$9.40	-\$9.40	-\$9.40	-\$9.40	-\$9.40
Total	-\$0.85	-\$5.51	-\$10.69	-\$10.69	-\$10.69	-\$10.69	-\$10.69
<i>Total Change Farm Gate Revenue from Baseline (Mil \$/yr)</i>							
Dairy	\$0.00	-\$4.25	-\$6.67	-\$7.36	-\$7.54	-\$9.56	-\$9.56
Sheep, Beef, Dairy Support and Grains	-\$0.84	-\$7.82	-\$15.97	-\$16.75	-\$16.85	-\$18.81	-\$18.81
Total	-\$0.85	-\$12.08	-\$22.64	-\$24.11	-\$24.39	-\$28.37	-\$28.37