## S42A Report, page 52 - Replacement Table 1 and accompanying explanation (26 May 2025)

## Table 1: Load reduction required to meet visual clarity in rural catchments andpredicted reductions achieve by PC1 as notified

Part FMU/catchment (Rural)	A. Modelled load reduction from PC 1 as notified	B. Reduction required to achieve target attribute state as notified (difference from modelled)	C. Reduction required from 2012- 2017 baseline to achieve target attribute state as revised (difference from modelled)	D. Reduction required from 2019- 2024 baseline to achieve target attribute state as revised (difference from modelled)
Takapū (Pāuatahanui Stream at Elmwood)	18%	24% (+6%)	26% (+8%)	2% (-16%)
Te Awa Kairanga rural streams and rural mainstems (Mangaroa at Te Marua)	20%	51% <mark>(+31%)</mark>	17% (-3%)	22% (+2%)
Te Awa Kairangi lower mainstem (Hutt River at Boulcott)	6%	24% (+18%)	25% (+19%)	6% (0%)
Wainuiomata Rural streams (Wainuiomata River downstream of White Bridge)	4%	7% <mark>(+3%)</mark>	8% <mark>(+4%)</mark>	0% (-4%)
Parangārehu catchment streams and south-west coast rural streams (Mākara at Kennels)	38%	34 % (-4%)	38% (0%)	48% (+10%)

333. Table 1 shows, in column C, the load reductions recommended by Mr Blyth and Ms O'Callahan in HS2. Based on those load reductions PC 1 provisions (as notified) are modelled to meet, or marginally exceed, the level of reductions required in Mangaroa and Mākara. In the other key rural FMUs, the modelled reductions would fall short of that required to achieve TAS. However, the load reductions are based on a 2012-2017 baseline. If the current water quality is considered (ie. a 2019-2024 baseline), then PC1 could overshoot in Takapū and Wainuiomata Rural streams (albeit again only marginally). The other point to note from Table 1 is the apparent improving trend in the Takapū and Hutt River part FMUs (ie. 2012-2017 versus 2019-2024). I also note that the predicted reductions relate solely to the farming provisions and do not take account of any reductions achieved through forestry and earthworks controls. Sources: Column A – Mr James Blyth HS 3 evidence: Appendix A Column B – PC1 Tables 8.5 and 9.4 as notified Column C – Mr James Blyth HS2 evidence Table 4

Column D – Mr James Blyth HS2 evidence Table 3

*Note*: Mr Blyth reports the results of modelling the sediment load reductions achieved by the recommended revised provisions in Appendix B (Table 4) of his HS3 evidence.