

MIDDLEMISS FARM HOLDINGS LTD & BUCKLAND LANDOWNERS GROUP

Proposed Waikato District Plan – Hearing 18 - Rural

SUMMARY STATEMENT – ECONOMICS – ADAM THOMPSON

1. I expect the historic trend, of an increase of around 200 lifestyle/rural households per annum, to continue in the Waikato District. The TDR policy and rules proposed by Middlemiss would encourage subdivision on less productive soils compared with the proposed Waikato District policy of allowing subdivision on child sites with up to 20% high quality soils.
 2. I estimate that one third of rural subdivision will occur on high quality soils if the s 42A recommended provisions are approved. There would be notably fewer lifestyle blocks created on land with high class soils if the Middlemiss submission relief is approved.
 3. A TDR policy allows for revegetation of lower productivity land and provides indirect and passive benefits through the provision of ecosystem services. These benefits are estimated to have a value in the order of \$2,600/ha annually. As an example, a 1 ha lifestyle lot providing 5 hectares of revegetation would generate \$13,000 of ecosystem service benefits annually, or \$179,000 in terms of NPV over 30 years (at a discount rate of 6%). If a quarter of new lifestyle blocks created over the next decade are as a result of TDRs created from revegetation the total NPV would be \$89 million. This is a significant economic benefit.
 4. The NPV of the construction and operation of new lifestyle blocks represents a significant contribution to the Waikato District economy. Over a 10-year period the NPV is \$1,121 million. Over a 20-year period this increases to \$2,385 million, and over a 40-year period this increase to \$4,714 million. In broad terms, the economic value of enabling 200 lifestyle blocks per annum over the 20-30 years is in the order of \$2-3 billion. This is a significant economic benefit and will also create opportunities for employment to be provided, regarding the requirements of s 32(2)(a)(i) & (ii) of the Act.
 5. The costs of removing agricultural land is estimated by Dr Fairgray to be between \$51 million and \$102 million in NPV terms (plus an additional 20% of negative indirect effects e.g. reduced agricultural processing). He calculated that this would be a total negative impact of \$61 million to \$122 million NPV. For the reasons outlined in my primary evidence, I believe this estimate is incorrect and the NPV is in the order of -\$3 million to -\$7 million. This is a minor cost compared to the significant benefits outlined above, regarding the quantification of benefits and costs (s32(2)(b)) and the net position.
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6. I have reviewed the summary evidence of Mr Steve McCowan in respect of the development costs and revenues of the Lot Subdivision and TDR creation from different revegetation options. This provides a useful basis to determine the types of development that are feasible in the marketplace under various policies, and in particular the quantity of hectares of revegetation that would enable each to be feasible.
7. The table below shows the summary results from this assessment. Lots that cost up to \$350,000 to produce are 'feasible' as shown in green, and therefore are likely to proceed in the marketplace, based on likely average lot sale values in the Waikato. TDRs that cost up to \$130,000 to produce are 'feasible' as shown in green, and are also likely to proceed in the marketplace.

Table 1: Feasibility of Revegetation by Type and Hectares

Minimum Feasible Sale Price	Hectares Planted				
	1	2	3	4	10
Riparian Lot	\$284,000	\$325,000	\$365,000	\$406,000	-
Riparian TDR	\$224,000	\$259,000	\$299,000	\$340,000	-
Bush Lot	\$268,000	\$332,000	\$396,000	\$460,000	-
Bush TDR	\$208,000	\$266,000	\$330,000	\$394,000	-
Natural Revegetation Lot	-	-	-	-	\$250,000
Natural Revegetation TDR	-	-	-	-	\$184,000
Wetland Lot	\$215,000	\$270,000	\$324,000	\$379,000	-
Wetland TDR	\$154,000	\$204,000	\$258,000	\$313,000	-

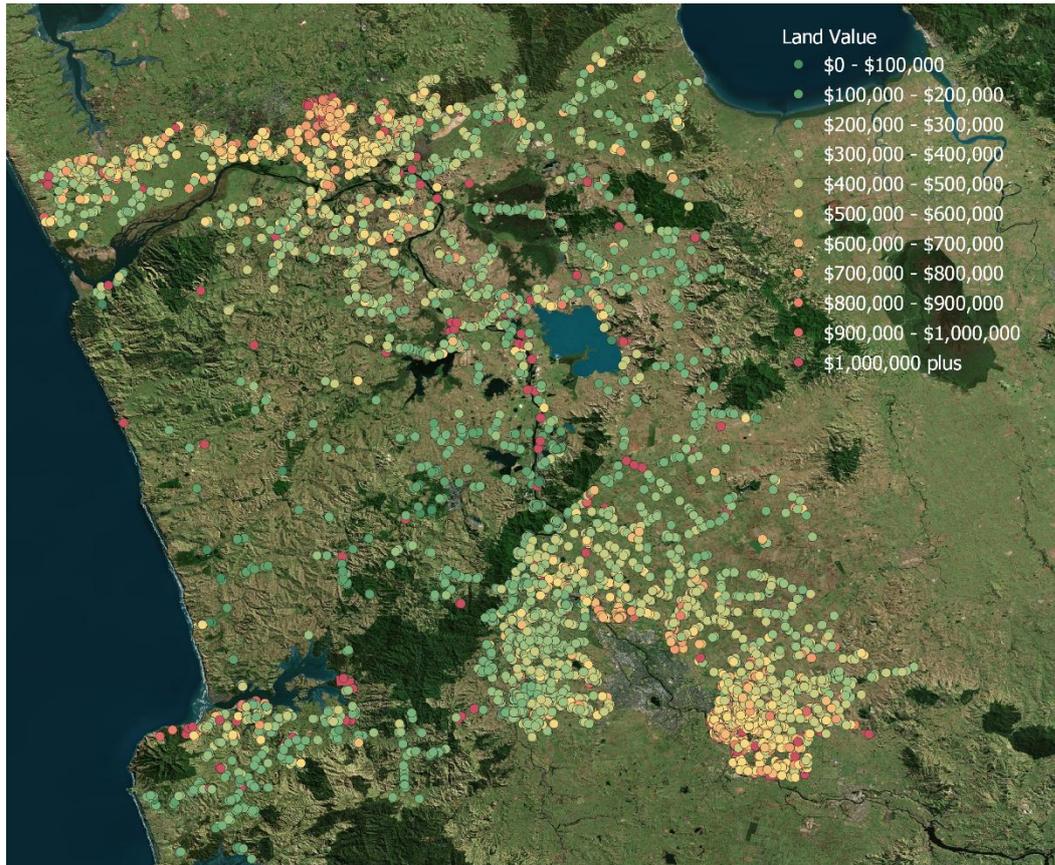
KEY
Feasible
Infeasible

Source: Urban Economics

8. There are several important implications from these calculations:
- Riparian in-situ Lots created on up to 3 hectares of planting are feasible. However Riparian TDRs are not feasible.
 - Bush Lots created in-situ on up to 3 hectares of planting are feasible. However Bush TDRs are not feasible.
 - Natural Revegetation in-situ Lots of 10 hectares are feasible, however TDRs are not feasible.
 - Wetland Lots created in-situ on up to 4 hectares of planting are feasible. However Wetland TDRs of up to only 2 hectares are feasible.
9. The reason TDRs created through revegetation are feasible up to around \$130,000 is there are other more cost-effective ways to create TDRs, for example creating them from protection of an SNA (mainly only fencing costs and weed and pest control), and this sets a lower market price for a TDR. Purchasers of TDRs are indifferent on how the TDR is created, however the producer of the TDR is limited by the market price.

10. The policy implication is that TDRs created through revegetation are only feasible with fewer hectares when compared to lots created through revegetation in-situ, and this is a central consideration for this policy. In broad terms, for the method to be effective (i.e. for applications to be lodged), revegetation lots should require no more than 3 hectares of planting, and TDR lots should require no more than 1 hectare of planting (with the exception of natural revegetation, which is 10 hectares for lots and around 5 hectares for TDRs).
11. It is important to distinguish the Waikato from the coastal parts of Rodney in terms of the values of lots created under enhancement provisions, and as recently settled in the AUP Cabra 2020 EC decision – Appendix C. I was involved in these proceedings and setting the areas to be protected/enhanced in the AUP appeals. Because the lot values in coastal Rodney were expected to be \$400,000 to \$500,000, the areas could be larger, and projects would still be viable. At the generally lower values for lots in the Waikato (it is location dependent) the areas need to be smaller for the TDR and in-situ enhancement methods to be implemented.
12. The following figure shows the land value of lifestyle blocks across the District. Locations that have lifestyle blocks of \$350,000 or greater (light green to red) will be feasible in respect of the analysis in Table 1, and can be expected to occur in the market.
13. As shown in Figure 1, lifestyle blocks tend to have higher land values surrounding Hamilton and near the southern border to Auckland, as well as near Raglan.

Figure 1: Lifestyle Block Land Values



14. The Middlemiss submission relief would not generally result in any additional lifestyle blocks being created in the Waikato District, however it would result in fewer lifestyle blocks being created on land that has high class soils. The Middlemiss proposed rules would therefore result in a net economic benefit that is greater than the Waikato District policy recommendations, and in my opinion best satisfies the analysis required under s 32 of the Act (opportunities for employment and economic growth, and cost benefit assessment).
15. I have reviewed Dr Fairgray's supplementary statement dated 16 September. I make the following brief comments in response:
 - Dr Fairgray correctly points out the difference between calculating GDP via the expenditure approach and the value-added approach. The expenditure approach is calculated by summing all the transactions of final goods that occur within an economy over a set period of time. The value added approach involves summing the value added at each stage of the production process. The two approaches are roughly equivalent. Taking the example of constructing a new house, the expenditure approach would simply include the value of the house. The value added approach on the other hand, takes into account the value added at each stage of the production process, e.g. the end sale price of planks of timber minus the cost of refining raw logs into that

timber, etc., and finally the end sale price of the house minus the cost of purchasing construction materials and paying for labour. Dr Fairgray estimates the value added from construction is approximately 29.2% of the expenditure on construction. While looking only at the value added for construction enables one to estimate the economic benefits of construction to the construction sector, it does not account for the benefits of construction in these other sectors. Forestry, Quarrying, Electricity, Plumbing, Transport and Logistics are a few examples of industries that benefit from increased demand for dwellings as the construction sector demands more of their goods and services. The expenditure approach captures the benefits to these other sectors as well.

- Dr Fairgray notes in paragraphs 3.18 – 3.19 that my estimate is of the impacts of all lifestyle block creation in the district regardless of zoning, rather only the impacts of lifestyle lots created from Rural zoned land. While the focus of this assessment is on the impact of lifestyle block development on rural zoned land, in order to understand the lifestyle block market, it is necessary to take into account other zones where lifestyle blocks occur. There is a degree of substitutability between Country Living zone, Village zone, Village 1000 zone, Rural subdivision as proposed and a 10 – 20 ha block of farmland. Properties in each of these categories are broadly substitutable. If for example, no future rural subdivision was enabled, then some potential purchasers from this market would purchase in each of the above substitute options, and some purchasers would decide there are no suitable alternatives and choose to locate outside of the District. In order to understand the impact of rural subdivision to create lifestyle blocks, the wider lifestyle block market must be understood.
- Dr Fairgray in his initial evidence estimates that 3.8% of all land in the District is currently used for lifestyle blocks, and that this will increase to 5.7% over the next thirty years, an increase of 1.9% of total land. Table 5-3 suggests that over a forty year period to 2061, a cumulative loss of value added of \$51 - \$102 million in present value terms and \$138 - \$276 million in undiscounted terms occurs in the primary sector as a result of rural subdivision. This is equivalent to a loss of 7.5% - 15% of primary sector production in 2020, substantially more than 1.9% loss of rural land. This is significantly less than the benefits of rural subdivision to the wider economy, of \$2 - \$3 billion dollars as outlined in my initial evidence, even if adjusted down to 29.2% as value added for construction, etc., as preferred by Dr Fairgray.

16. In my opinion the evidence on rural sub-division supports the conclusions that:

- there is no practical limit on the number of lifestyle blocks that can be expected to occur under the Waikato District Plan (i.e. supply is unconstrained and will meet demand of around 200 lifestyle block per annum),
- rural lifestyle blocks result in economic benefits that significantly outweigh the economic costs,
- rural lifestyle blocks that include additional native revegetation or the protection of native vegetation have greater economic benefits than rural lifestyle blocks that do not.

Adam Thompson

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