



# Economic Aspects of Rural Subdivision - Supplementary

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consulting



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# Introduction

## Purpose

- 1.1 My name is James Douglas Marshall Fairgray. My qualifications and experience are set out in my report Economic Aspects of Rural Subdivision, where I have also set out my agreement to abide by the code of conduct for expert witnesses.
- 1.2 In this supplementary statement, I address matters raised in the statements of evidence of Mr Shane Hartley and Mr Adam Thompson.
- 1.3 I address Mr Hartley's statement in regard to:
  - a. The proposal that 5.1.1 strategic objective for the rural environment be amended to exclude reference to productive rural activities.
  - b. The lack of assessment of the likely or potential effects of the scale and location of subdivision enabled, in regard especially to land use change – including productive activities – and also population growth and change, including flow on effects such as travel and access to goods and services for the rural population.
- 1.4 I address Mr Thompson's statement in regard to:
  - a. His estimates of the economic effects of the changes sought in Mr Hartley's evidence, especially his assumptions, methods and the extent of his assessment, and his conclusions as to the extent of economic 'benefit'.
  - b. His support for amendments proposed by Mr Hartley, without apparent assessment of the likely effects of those methods, or the likely or potential outcomes in terms of land use change and economic activity in the District.
  - c. His contention of a calculation error in my estimate of the impact on primary sector output of loss of productive land to lifestyle uses (his para 28), and that my estimate of impact on the productive primary activity is inaccurate (his para 52).

## 2 Mr Hartley's Statement

- 2.1 Mr Hartley proposes a number of changes, with a range of potential consequences for the Waikato District economy and community. He draws on and supports the Middlemiss Farms Limited submission. I have focused on Mr Hartley's representation as being from a planning perspective.
- 2.2 Mr Hartley supports a transferable development rights (TDR) approach to subdivision of rural land. In my view, TDR approaches can offer advantages including by re-locating subdivision potential to achieve a more appropriate geographic distribution of lifestyle properties than may be possible from a per-lot approach. This is especially in terms of reducing the loss of productive land and directing lifestyle living to locations nearer to settlements where travel and utilisation of services is more efficient.
- 2.3 In my view it is very important that any TDR approach is well thought through, and carefully designed to best achieve the potential benefits from subdivision – to existing landowners (mostly primary producers), potential purchasers of properties created (mostly lifestyle households) and the community at large (especially environmental and social outcomes, and productive activity) – while also seeking to minimise the negative effects – especially the loss of productive land, disruption to productive units, and foregone opportunity. While some of Mr Hartley's proposals might contribute positively to rural subdivision policy, in my view he has not provided any adequate assessment of the likely outcomes from the changes he proposes – in terms of likely scale and distribution of direct subdivision outcomes, and the effects of those outcomes arising from land use change (including for productive activities) and population patterns, and their consequent effects.

### 2.1 Proposed Change to 5.1.1 Strategic objective

- 2.4 Mr Hartley's proposed changes at the higher level - to the Strategic objective for the Rural Environment - are the basis for his proposed specific changes to the subdivision provisions.
- 2.5 His proposed change to 5.1.1 Strategic objective is a fundamental re-orientation of the Rural Environment away from its established focus on productive activity supporting the District economy and the farming community, to give priority to lifestyle living.
- 2.6 He proposes re-wording of the 5.1.1 Strategic objective for the Rural Environment, to remove reference to 'productive' rural activities from that objective – at 5.1.1 (a)(i) and at 5.1.1 (a)(ii) he would remove the word 'productive' in relation to 'rural activities' (his para 6.2).
- 2.7 These changes would apply to the entire Rural Environment, including all Rural, Country Living, Village and other non-urban zones, comprising 99.5% of the total District. They would apply to all subdivision, use and development – that is, all activity - within the Rural Environment.
- 2.8 Both changes would be significant. At 5.1.1 (a)(i), the change would see the Strategic objective in relation to protection of high class soils apply to any 'rural activities'. There would be no longer reference, or implied preference, to protect those high class soils for 'productive rural activities'.
- 2.9 In my view, that change would fundamentally alter the purpose of protecting high class soils. There would no longer be need to protect those soils so that they could support productive activities such as farming or horticulture. Instead, those soils would be protected for any rural activities, including country living or other peri-urban activities. The change would remove the clear nexus which

currently exists between the protection itself of the soils and the rationale for that protection - to preserve their value for productive land use.

- 2.10 I consider this change would substantially weaken the rationale for protecting high class soils. That is because the need for protection of the soils would have been downgraded to simply accommodate rural activities of any sort, irrespective of the significance of those soils to the activity, and the economy.
- 2.11 Of particular note, there would be no grounds for preferring one rural land use over another rural use. For example, a lifestyle property which would make no use of the productive potential of the soils would be deemed of equal significance to a horticultural unit which made full use of the productive capability of the soils.
- 2.12 The second part of Mr Hartley's proposal is at 5.1.1 (a)(ii), where the change would mean that the Strategic objective for the Rural Environment would apply to all 'rural activities', without differentiation as to their contribution to the District economy and community. There would no longer be explicit preference or priority for 'productive rural activities'. In my view, that would be another fundamental change. All rural activities would be included in the strategic objective, irrespective of their role in the District economy or community. The priority for productive rural activities would be lost as a result.
- 2.13 Overall, Mr Hartley is advocating a blanket change to re-orient the Rural Environment away from prioritising productive rural activities to instead treat all rural activities equally. That would be a major shift for Waikato District. Currently, productive activity is dominant in the Rural Environment, occurring on about 76% of rural land. Lifestyle properties account for around 22%, so that between them these two uses account for 98% of rural land. The main effect would be on productive activity, since lifestyle properties are by a long way the minority use within the economy. A major part of their role is to provide residential capacity, and there are many options for residential capacity in other rural environments – notably country living and village zones – as well as in the urban environment. However, the Rural zone is the only place where productive primary activity can occur.

## 2.2 Rationale for Proposed Change

- 2.14 Given the magnitude of the change he proposes for the Rural Environment, I would have expected more substantial evidence from Mr Hartley as to the reasons why he is proposing such a significant change. That would be to demonstrate both the likely parameters of such change including the scale and distribution of effects on land use, subdivision and development, and also to indicate likely outcomes in social, cultural, economic or environmental terms.
- 2.15 Mr Hartley offers limited supporting evidence of what the outcomes might be. His reasoning (para 6.1) is that it is important to *"modify the current over-riding focus on productive rural activities"* and that there should be reduced emphasis (para 6.3) on *"traditional"* productive farming activities, with greater emphasis on *"rural residential subdivision in particular"*. He contends that the wording *"productive"* is taken to mean only commercial primary products, and that has been *"at the exclusion of the vital 'ecosystem services' that enable the 'production' "*, including freshwater.
- 2.16 Mr Hartley does not offer evidence that a blanket policy shift should be applied across the whole Rural Environment, nor evidence that a shift to rural residential activity would offer solutions. I note that primary production activity includes a number of sectors including farming where

innovation and change is a consistent, characteristic feature. Seeking to portray those activities as being merely “*traditional*” is not appropriate in my view.

- 2.17 *Prima facie*, I agree that there are benefits from limiting the loss of productive land by enabling smaller lifestyle lots. I also agree that there are likely benefits from locating lifestyle properties relatively close to towns or villages, so that access to goods and services is easier, and there is less travel demand on rural roads. And there are environmental benefits from conservation planting and watercourse protection. And that there is potential to better achieve such outcomes through a transferable subdivision approach.
- 2.18 However, it is important to understand the extent of benefits and costs, and the extent of change. Almost certainly in the Waikato District - and other rural regions - there will be instances where productive activity places excessive demands on ecosystem services. There will be other instances where that is not the case at all - primary production practices vary among operators, just as the carrying capacity of ecosystem services will vary among locations. While Mr Hartley contends that primary production activity has been to the “*exclusion*” of the vital ecosystem services, if that were endemic across the Rural zone then it is likely that productive primary activities which depend directly on those ecosystem services would have long since ceased to be viable. Where primary production activity does place excess demand on ecosystem services, then options to reduce demands to make production activity environmentally sustainable include modifying land management practices - without or with land use change such as a shift from farming to lifestyle property.
- 2.19 One important question is whether such a wholesale re-orientation of the Rural Environment is required to achieve environmental improvements, particularly when the great bulk of those improvements will come from landowners engaged in productive activity, not those on lifestyle properties. That is inevitable simply because of the basic arithmetic of the District’s land use, where some 76% of the SNA area and around 71% of the high quality soil is in lots engaged in productive uses. That will still likely be the case in the long term - to illustrate, if the number of lifestyle lots in the Rural zone were to double to around 17,000 from the current 8,540, at 1.6ha per lot that would still see productive activity as the dominant land use, accounting for 72% of the District total.
- 2.20 Another key matter is to understand the likely parameters of change, and what the Rural Environment would be like if the proposed changes were adopted and applied. Again to illustrate, Mr Hartley has suggested a TDR scheme where subdivision rights could be transferred from qualifying lots (parent lots) to host lots in other locations. He identifies some 36 areas within 2km of schools or residential zoning where new subdivision could occur, with the rights transferred from other lots qualifying on grounds of conservation or amalgamation of lots with high class soils. His scheme would see new lot sizes of 4,000m<sup>2</sup> to 8,000m<sup>2</sup> with an average of 6,000m<sup>2</sup>. At the high level, the potential for creation of new lots would be very large - an area of radius 2km would contain about 1,265 ha, which could in theory could accommodate some 2,000 new lots.
- 2.21 However, Mr Hartley does not provide any estimate of the total potential for creation of new lots for lifestyle living, by showing the additional potential under his proposals on top of what would be enabled under the Council provisions. I note that the District has seen very considerable growth in lifestyle holdings, showing the largest increase of any district in New Zealand over the 2000-2015 period (Corelogic, 2019) with lifestyle holdings accounting for nearly three-quarters of the total increase in residential properties in that time.

- 2.22 This highlights the need to understand what might be the outcomes in 10, 20 or 30 years' in terms of the "*land use, subdivision and development*" in the Rural Environment. Key questions include how many potential parent lots there would be for *in situ* and TDR subdivision under the proposed provisions, where those lots are located within the Rural Environment, what is the current level of productive activity or other activity on those lots, how much productive land is potentially affected, and over what time frame. These are matters which I have set out in my Report in relation to the proposed provisions for general subdivision in the rural zone, and conservation subdivision. Further, it is important to understand the potential or likely effects in combination with the provisions for general subdivision, given that there is substantial scope for the creation of new lots within the Rural zone itself, as well as the Country Living and Village zones.
- 2.23 In the District's Rural zone, there are approximately 85,567 ha of LUC1-3 soil, including an estimated 24,657 ha (about 29%) on lifestyle lots (as defined by Corelogic), and 59,964 ha (70%) on land engaged in "productive" activities (dairy, horticulture, pastoral, other farming, forestry). Important questions relate to the number of productive lots which the proposed changes might affect – the District has around 234,574 ha in productive activity in the Rural zone (75.5% of the total), on 7,386 lots (only 44% of the total Rural lots).
- 2.24 In my view, it is important to recognise that while the proposed change to the Strategic objective would make subdivision of rural land and creation of small holdings for lifestyle purposes easier, such a change would have implications well beyond those arising from just subdivision of rural land. That places the focus on consideration of higher order effects, across the District's rural community and whole community.
- 2.25 On that basis I reiterate my view that it is very important that any transferable subdivision approach is well thought through and carefully designed to best achieve the potential benefits from subdivision. Mr Hartley's evidence does not offer sufficient information to establish the benefits, or the costs, of the proposed changes and how they would likely impact on the District's community or economy.

## Mr Thompson's Statement

- 3.1 Mr Thompson has provided a statement in which he outlines *"..the costs and benefits of the ...Middlemiss Submission recommended policy related to rural subdivision of lifestyle blocks, and compares this to the Waikato District policy recommendation."* (para 4). He considers the creation of a TDR structure for receiver sites without high class soils, from amalgamation of two Rural zone sites or the establishment of 3-5ha of native vegetation.
- 3.2 Mr Thompson contends that the impacts of foregone primary production is minor compared with the benefits of subdivision, and that the Middlemiss submission would *"result in a net economic benefit that is greater than the Waikato district policy recommendation"* in s32 terms (his para 53).
- 3.3 Mr Thompson also contends that my estimate of the impact on the primary sector contains a calculation error (his para 28), that my estimate of the impact on the economy is "erroneous" and that the impact is in the order of only -\$3m to -\$7m (his para 52).
- 3.4 I have examined Mr Thompson's evidence carefully. I have a number of concerns about his statement. I conclude that his assessment contains a number of significant errors. I further conclude that he has not undertaken a sufficient assessment – in terms of either accuracy or scope – to support his conclusions. The reasons for my conclusions are detailed below.

### 3.1 Mr Thompson's Assessment

- 3.5 Mr Thompson has provided some information relating to subdivision of rural land in Waikato District, including rural building consents (Figure 1, p3), rural household growth (Figure 2, p4), and additional lifestyle blocks (Figure 1, p5). He has drawn on my figures of capacity for additional lifestyle blocks (his Figure 4, p5). He provides his estimate of lifestyle block land use (Figure 5, p6).
- 3.6 He has then provided an estimate of the NPV of Lifestyle Block Development (his Figure 5, p7), his estimates of Agricultural Output (Figure 6, p8), another estimate of Agricultural Output (Figure 7, p9) and his estimate of the Impact of Lifestyle Blocks on Primary Sector Value Added (his Figure 8, p10), where he has used some numbers from my Report, and then applied to these his own calculation. I set the figure and page numbers out specifically here because Mr Thompson has repeated some figure numbers, though not on the same page.
- 3.7 Mr Thompson has estimated the economic impact of lifestyle blocks according to the construction effect of new dwellings on lifestyle lots, and the consumption effect of households which would occupy those dwellings. He also offers a broad indication of the impact of indigenous revegetation on ecosystem service values.

#### **Estimation of "Benefits"**

- 3.8 I have concerns first about Mr Thompson's estimation of the benefits of lifestyle lot creation.
- 3.9 He has adopted gross output as a measure of benefit. That is not accurate in my view. Gross output is a measure of total expenditure, and it includes a substantial amount of double counting. For assessment of economic effects, gross output is almost never used to indicate contribution to an economy, or to show benefit, or cost. The substantial double-counting in gross output is the reason that 'Value Added' – which is broadly equivalent to GDP - is adopted as a standard indicator of economic effect. Value added considers only that share of gross output which represents a real



contribution to the economy. It is a standard measure for economic analysis, and it is what I have used in my assessment.

- 3.10 Moreover, value added is not a measure of benefit. It is an indicator of the contribution of an activity or a sector to an economy, within the general view that a positive contribution is a better outcome than a negative one - it is better that an economy is larger. However, only some of the value added effect represents a benefit, because creating value added also incurs costs of resources and time.
- 3.11 It is not accurate for Mr Thompson to claim that gross output represents a “benefit” or even that it shows the contribution to the economy of an activity such as creation of lifestyle properties.
- 3.12 The contribution to the economy as identified by value added is substantially less than the dollar value of gross output. In the Waikato District economy, the value added from construction is approximately 29.2% of gross output<sup>1</sup>, and that from retail output is approximately 60.3%. By using gross output rather than value added, Mr Thompson has substantially overstated – by at least 2 times - the economy impact of lifestyle blocks (as shown in his paras 18-20, and his *Figure 5 NPV of Lifestyle Block Development*).

#### **Contribution to the Economy**

- 3.13 In any case, Mr Thompson’s estimate of impact is based simply on growth in household numbers on lifestyle lots. He counts the present value of gross output from construction of 8,000 dwellings at \$400,000 each (inflated at 1% annually), plus the value of total expenditure by those households on all goods and services at \$52,000 per household per year (again inflated at 1% annually). The construction represents around 41% of his estimated total, and household expenditure around 59%, in present value terms.
- 3.14 Mr Thompson’s impact estimate is driven by population growth *per se*, irrespective of whether that growth occurs on residential, country living, Rural or other zones within the District. He assumes that such growth depends on the availability of lifestyle lots, and that it would not otherwise occur.
- 3.15 I note that the District’s future household growth may occur in a range of living zones, and it does not depend on the subdivision of Rural zoned land. A share of the population growth will be dependent on the availability of Rural zoned lots, but not all of that effect can be attributed to the creation of new lifestyle lots. There is capacity for over 8,000 new lots to be created, and Mr Thompson acknowledges that the changes proposed by Middlemiss and through Mr Hartley would not result in the creation of any additional lifestyle properties, or result in any higher rate of household growth than is already provided for in the provisions offered by Council. His estimate is simply a general indication of how household growth including construction of more dwellings would flow through an economy.
- 3.16 Moreover, Mr Thompson has overstated the effect of household growth on total household spending on all goods and services. First, there is a double count in his estimate – around one quarter of household expenditure on average goes to housing. The capital cost of housing is already counted in his estimate, so by taking total household expenditure he has double counted, and even the total value added figure would be too high by around 20%.

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<sup>1</sup> Market Economics 2019 – Waikato District economy model.

3.17 Second, a substantial share of expenditure by Waikato District households on goods and services of all types leaks out of the local economy, to businesses in Hamilton and Auckland in particular. By not allowing for such leakage, Mr Thompson has further overstated the contribution of subdivision to the District economy.

#### **Impact Estimates include All Lifestyle Lots Time Period of Impact**

3.18 Third, and more significantly, his estimate is of the impacts of all lifestyle blocks in the District.

3.19 The focus of this assessment is subdivision of Rural zoned land, but Mr Thompson has not examined specifically the impacts of lifestyle lots created from Rural zoned land. He has included all subdivision in the Rural Environment, and included new lots on Country Living, Village and Village 1000 zones.

3.20 According to the figures in my Report - on which Mr Thompson has drawn mostly for his Figure 4 - the capacity in Rural zones would represent 13.3% of subdivision potential through the general provisions, and 25.6% of capacity under the conservation provisions route, or 38.9% in total. Since this hearing is about the provisions relating to subdivision of Rural zoned land, then it is appropriate to consider just those effects, and not the total effect of all subdivision and new lot creation on Country Living, Village and other zones as well.

#### **Time Period of Impact**

3.21 A fourth concern is that Mr Thompson has estimated his impacts over 40 years, which is 10 years' longer than my assessment. By selecting 40 years, his estimate is higher by around 31% than his figure for just 30 years.

#### **Total Impacts of Lifestyle Subdivision**

3.22 Overall, Mr Thompson has estimated the impact in gross output terms at \$3,612m over 30 years, and \$4,714m over 40 years as present values (his Figure 5, para 18).

3.23 To even approach a like-for-like comparison with my estimates of effects, his figures would need to:

- a. be based on value added effects, not gross output, and
- b. remove the double counts and outward leakage effects from his household spend estimates, and
- c. relate to only the lifestyle lots created from subdivision of Rural land, not all lots created, and
- d. be estimated over 30 years, not 40 years

3.24 Taking these matters into account, the value added impact of new lots from Rural zoned land would be in the order of \$500m over 30 years, and that is if all expenditure on new dwellings is included, and all household expenditure is included. Mr Thompson's figure of \$3,612m of benefit over 30 years over-states the contribution to the economy by around seven times. Mr Thompson states that the proposed provisions would not result in any additional subdivision (para 53), and his estimates relate only to what would already be provided for under Council's proposed provisions. However, that is not the case, as shown in Ms Overwater's report, for conservation lots alone. Neither Mr Hartley nor Mr Thompson has offered estimates of the total subdivision possible under the proposed provisions. There is no suggestion that the additional lots enabled would be offset by a reduction in lots already enabled on other properties under the Council provisions.

- 3.25 In any case, Mr Thompson has offered no indication of any different contribution to the economy and community if the proposed provisions enable subdivision to occur in different locations.

**Mr Thompson provides no estimate of effects on primary production**

- 3.26 Most importantly, Mr Thompson does not provide any estimate of what the outcomes and effects might be from a different pattern of subdivision under both an in-situ and TDR scheme in terms of foregone primary production activity. He offers no alternative estimates of effects on farming or horticulture or forestry or other primary activity.
- 3.27 Accordingly, he has no basis for his conclusion that *“the Middlemiss submission would therefore result in a net economic benefit that is greater than the Waikato District policy recommendation.”* Nor does he have any basis for his contention that it should be *“...recommended for approval in respect of economic effects....under s32 of the Act.”* (his para 53).
- 3.28 In my view, Mr Thompson has not offered evidence of effects which relates specifically to the proposed provisions from the Middlemiss submission and set out in Mr Hartley’s statement.

## 3.2 Potential effects on primary sector output from subdivision

- 3.29 Mr Thompson contends (para 28) that I have made a calculation error in my estimates of impact on the primary sector. That is not correct. I have calculated the effects on the primary sector annually over the next 30 years, to show the cumulative effect in total over the planning period. I have shown that effect in undiscounted terms, and also discounted at 6% per annum to show the present value (PV) of the foregone production. That is the usual procedure for calculating the present value of a flow of revenues or costs over a time period. That is set out clearly in my report.

*“5.1 On this basis, the potential foregone primary sector value added has been calculated in undiscounted and present value terms (at a 6% discount rate) over the next 30 years to 2050, to apply a long term horizon. The results are summarised in Table 5.3.”*

- 3.30 My estimate of the foregone primary production over those 30 years is -\$138m to -\$276m (undiscounted) and -\$51m to -\$102m discounted (my Table 5-3). For assessing the effects of a policy affecting land or other resource use, I consider it is appropriate to show the cumulative effects over time. That is because it reflects the way in which a land use policy such as subdivision of Rural zoned land has effect, and it allows for change in land use to occur cumulatively, as individual landowners take up the opportunity to subdivide their land, and sell lots.
- 3.31 However, Mr Thompson has used a quite different approach. Rather than consider effects as they occur cumulatively over time, he has instead considered the foregone primary production in just one year. He has used my estimates of future value added for the main primary sectors for the year 2061 (my Table 5-3), and he has then calculated the foregone production just for that year. He has not examined the effects as they cumulate over time.
- 3.32 Despite having adopted a quite different approach, he has compared my 30-year estimate with his own 1-year estimate, and he has then claimed that my estimate contains a calculation error. He further claims that my figures show a *“significant reduction in the future growth of output of 38-75%”* (para 27).
- 3.33 Mr Thompson’s contentions are not correct. It is simply not valid to compare a 1-year future snapshot with a 30-year cumulative effect.

- 3.34 In my view, his approach to assess the effects of changes in land use and foregone primary production for only a single year, some four decades into the future, is not appropriate for examining the effects of a policy whose effects will occur cumulatively over time. Taking a single year snapshot, as he has done, substantially understates the effect on primary production. The proposed Plan provisions will enable subdivision of Rural zoned land, and that subdivision is likely to commence in the short term and occur progressively over time. Once land parcels are subdivided and sold, then their production potential is foregone from about that point in time. To illustrate, for new lots created and sold in 2021, their production potential will be foregone from 2021 into the future. For lots created and sold in 2022, their production potential will be foregone from 2022, and so on.
- 3.35 Mr Thompson's calculation indicates an outcome where there is no subdivision until 2061, and then all of the subdivision enabled occurs around that year, with the reduction in primary production occurring only from 2061. In my view, that is not an appropriate basis for assessing the effects of the subdivision policy.
- 3.36 I further note there is a direct conflict between Mr Thompson's estimates of the benefits of subdivision, and his own estimates of costs. For his estimates of benefits, he has assessed benefits cumulatively, as they would likely occur over time. That is how I have calculated cumulative costs, and in my view, that is the appropriate approach. However, to estimate costs, he has considered only a single year. Mr Thompson does not explain why he has adopted one method where he estimates the positive impacts of lifestyle lot creation cumulatively over 40 years, and a quite different method where he estimates the negative impacts over just 1 year. One obvious implication is that he does not have a sound basis for comparing his estimates of costs with his estimates of benefits.

#### **High Quality Soils**

- 3.37 Mr Thompson estimates that the Council's subdivision policy would mean about one-third of subdivision will occur on high-quality soils (para 49). That would potentially mean the loss of 600-700 ha of highly productive land per decade (para 17) which would equate to 1,800-2,100 ha over 30 years. He has not offered detail on how he has reached his estimate.

#### **NPS-UD**

- 3.38 Mr Thompson offers comment on the NPS-UD. I am not certain of his reasoning, given that rural subdivision – including lifestyle properties - is by definition not urban.

#### **Eco System Services**

- 3.39 Mr Thompson provides an estimate of ecosystem service benefits at \$2,600/ha/yr. On that basis, he identifies a present value of \$89million (para 50) from around 500 lots created through the TDR mechanism over a decade. Mr Thompson attributes all of the ecosystem service value to vegetation. However, that means he assumes that there is no existing indigenous vegetation on any of the lots. He also assumes that existing land uses deliver no ecosystem services. He makes no allowance for lots to be already contributing to the value of ecosystem services. He provides only a gross figure. Even if his gross figure were accurate, the value of those existing services would need to be netted out from the value when they are fully vegetated. He does not provide any detail on the extent of net additional revegetation. Accordingly, in my view his estimate is likely to significantly overstate the additional value of ecosystem services which might be attributed to the TDR mechanism.

- 3.40 Further, the current provisions enable subdivision from conservation planting, with a potentially significant area of planting provided for. In the context of finite demand for lifestyle properties, Mr Thompson considers a gross effect only, and he does not offer an indication of the net additional conservation planting that might arise from the proposed TDR approach.
- 3.41 On that basis, in my view Mr Thompson does offer some relevant information on effects on ecosystem services, but does not offer a basis for assessing the net additional effect from the TDR mechanism.

### 3.3 Overall assessment

- 3.42 Mr Thompson has provided some information on specific aspects of subdivision. However, he has not offered a view of the likely outcomes in 10, 20 or 30 years in terms of the “land use, subdivision and development” in the Rural Environment.
- 3.43 As I noted above in relation to Mr Hartley’s evidence, obvious questions relate to the extent of subdivision and change which might arise from the TDR approach, including potential numbers of lots possible under the proposed provisions, where they might be, the current level of productive activity or other activity on the lots, how much productive land is potentially affected and over what time frame, again matters set out in my Report. I again note the importance of examining likely effects in combination with the provisions for general and conservation subdivision, given scope for the creation of new lots within the Rural zone itself, as well as the Country Living and Village zones.
- 3.44 Mr Thompson has not offered an overall description of potential outcomes as a basis for assessing the TDR option compared with those proposed by Council.

### Conclusions

- 3.45 I have examined Mr Thompson’s evidence. I have identified a number of major errors in his analysis, which have led him to overstate the benefits of rural subdivision by many times. Other errors have led him to understate the costs of rural subdivision, again by many times. On top of that, he has not offered any evidence as to the overall outcomes for subdivision, use and development in the Rural Environment under the proposals he supports.
- 3.46 On that basis, I consider his contention that *“the Middlemiss submission would result in a net economic benefit greater than the Waikato District policy recommendation”*, in terms of s32 of the Act, is simply not supported by the evidence which he offers.

J D M Fairgray

23 September 2020