



Attachment F

High Level Cost / Benefit Assessment of Development Scenarios

Waimakariri Residential Red Zone Recovery Plan – High Level Cost Benefit Assessment of Development Scenarios

1. BACKGROUND

The Canterbury earthquakes of 2010 and 2011 caused unprecedented and widespread damage to greater Christchurch. In Kaiapoi, The Pines Beach and Kairaki approximately 89ha of predominantly residential land were zoned red (see the Residential Red Zone map in the Appendices).¹ The Waimakariri District Council was directed by the Minister for Canterbury Earthquake Recovery to prepare a draft Recovery Plan.

The preliminary Draft Recovery Plan (pDRP) proposed a package of 25 future land use areas – the Council’s preferred Mixed Use Scenario - across Kaiapoi, The Pines Beach and Kairaki. These 25 areas can be broadly categorised into the following land use types:

- Business
- Rural
- Commercial Recreation
- Greenspace
- Heritage and Mahinga Kai
- Infrastructure
- Coastal Park
- Potential Private Lease (no permanent buildings)

1.1 Assessment Methodology

Following a public hearing process in April 2016 and to assist development of the draft Recovery Plan seven theoretical alternative land use scenarios were developed (in addition to the preferred Mixed Use Scenario). The alternative scenarios are based on suggestions received during public engagement, constraints identified in the Technical Advisory Panel (TAP) report, further detailed geotechnical information, and market valuation information. These alternative scenarios provide more area for identified broad use types (e.g. more area allocated to business in the Business Focus Scenario), using the Mixed Use Scenario as the starting point.²

For all eight land use scenarios the key features, issues, benefits and assumptions were identified at a high level.³ Criteria were developed then used to carry out a high-level analysis, and thereby ‘score’ the Council’s preferred future land use option (the Mixed Use Scenario) and each of the alternative scenarios.⁴ For the three highest scoring scenarios the implementation capital costs were collated (where known).

¹ This figure includes remaining private residences and roads. Excluding these, the total area is approximately 83ha

² Except for the status quo, which simply sets out the existing land uses

³ To avoid repetition, under the alternative land use scenarios the assessment focuses on the changes relative to the Mixed Use Scenario.

⁴ The high level cost benefit assessments were undertaken in a workshop format involving representatives of the Council, the Greater Christchurch Group, Ngai Tahu and the Core Project Team

1.1.1 The Criteria

The criteria were developed to succinctly capture and balance the multiple considerations for future land use options in the Waimakariri Residential Red Zone. These considerations include: the objectives and obligations in the Minister's direction; the Recovery Strategy; the Canterbury Earthquake Recovery Act; the Greater Christchurch Regeneration Act; the vision and goals in the pDRP; Waimakariri District Council's Long-Term Plan; and relevant statutory planning documents. The criteria are:

1 *Best balance of regeneration objectives*

- Social – including supporting community wellbeing and growth
- Cultural – including reflecting iwi values, aspirations and history; celebrating heritage values
- Economic – including supporting sustainable business and employment growth
- Environmental – including restoring and enhancing the natural environment

2 *Optimises value for money*

- Considers whole of life costs – affordable now and in the future
- Considers possibility of financial return for the Crown
- Fiscally responsible – does not expose WDC and the Crown to financial risk
- Economically viable – considers potential market demand

3 *Practicality*

- Supports a pragmatic, timely approach to regeneration
- Considers land damage/conditions and feasibility of remediation and flood mitigation
- Considers the impact on the current and future land owner
- Efficient implementation and management model

4 *Resilient*

- Balances current and future needs of the district and greater Christchurch
- Takes into account natural hazards and future events
- Integrates with surrounding areas and uses, including infrastructure requirements
- Reflects and promotes community and stakeholder buy-in

1.1.2 Scoring Process

Each scenario was ranked on a scale of 1-4 for how they meet each of the criteria. The optimal future use represents the best balance across the four criteria. The scale used was as follows:

1. Not met
2. Partially met – met to a limited extent
3. Broadly met – met to a large extent, with some omissions
4. Met, and in some cases exceeded

1.1.3 Assumptions

For this scenario assessment a number of overarching assumptions have been made as follows:

- The Crown does not wish to be a long term land owner for large parts of the red zone;
- The Crown will not undertake further capital investment for such things as land repair / remediation;
- All Greenspace areas proposed to be vested in the Council will be at no or negligible cost;
- Greenspace areas not owned by the Council could still be managed by the Council, with the Crown retaining ownership;
- There will be no compulsory purchases of remaining private residences, which will remain residential under all of the land use scenarios;
- All the technical supporting information is accurate, can be extrapolated for each of the scenarios and be relied upon to remedy or mitigate the constraints;
- There will be no more than 5% soil contamination in any regeneration area;
- The existing cost share agreement between the Council and the Crown for infrastructure (including roading) will continue to apply;
- The Council's infrastructure cost estimates allow for services to the boundary of each lot;
- The Council's infrastructure cost estimates include a confidence based contingency and engineering fees, but exclude GST;
- The council has budgeted for services to support the Mixed Use Scenario. Any upgrades required to the service network to support alternative scenarios will be paid for by 3rd parties;
- Private developer(s), such as for the business and residential areas, will cover all development costs including land repair and flood mitigation costs;
- There are development contribution credits that could be applied to replacement residential and business activities;
- Damaged infrastructure repairs arising from land repair works undertaken have not been budgeted for;
- The existing Stormwater Management Area in Courtenay is adequate for future development needs;
- The roading layout in the Red Zone is broadly the same as the existing area, with the exception of the new roads already identified through the pDRP;
- Any existing roads to be retained would remain at their current levels;
- New roads would be designed with a level of service appropriate to the end use;
- Any new residential development in the Red Zone land would have the same density as that which existed pre earthquakes; and
- New residential and commercial development would require a gravity sewer system.

In addition to these overarching assumptions, some additional scenario specific assumptions have been made (as identified under each scenario). All the assumptions will need to be tested and confirmed with the Crown when the draft Recovery Plan is provided to the Minister supporting Greater Christchurch Regeneration for his consideration.

1.2 Appendices

Attached in the appendices to this document are:

- A spatial plan showing the Waimakariri Residential Red Zone;
- A table identifying the land areas (in hectares) for each of the scenarios analysed; and
- A table setting out the scores for each development scenario.

2. LAND USE SCENARIOS ASSESSMENT

2.1 Mixed Use Scenario (pDRP Preferred Scenario)

2.1.1 Key Features

The key features are as proposed in the pDRP. These include a mix of greenspace (25.91 ha comprising various uses including sports fields, neighbourhood parks, a dog park and opportunities for edible landscapes); business (7.32 ha, likely comprising yard based and large format retail and residential opportunities)⁵; commercial recreation (1 ha, comprising a motor caravan park); rural (30.59 ha, likely involving cropping and grazing, but excluding intensive agriculture); heritage and mahinga kai and coastal park (15.33 ha, likely comprising open space, recreation opportunities and edible landscapes); and the private lease of open space (3.07 ha, for such activities as boat storage, tennis courts, etc.).⁶

As set out in the pDRP and supporting information, the Mixed Use Scenario is technically feasible and meets a range of high level goals, including responding appropriately to:

- The Statutory Direction (e.g. promoting the wellbeing of communities);
- Community feedback (e.g. providing more greenspace);
- The pDRP goals (e.g. returning the regeneration areas to active use in a timely, efficient and economic manner); and
- The planning framework (e.g. enhancing biodiversity and supporting the Kaiapoi Town Centre).

2.1.2 Issues, Benefits and Assumptions

The issues, benefits and assumptions of the Mixed Use Scenario are identified in the pDRP and other supporting information and have therefore only been briefly summarised here. Of the issues: some of the projects are long term (i.e. from 2028 onwards); for some activities, such as business, there are comments in support and opposition; there are significant costs to the Council for the proposed recreation areas; and some ongoing management may be required for leased areas.

⁵ This represents a 46% expansion on the existing Kaiapoi Town Centre area of 15.9 ha

⁶ See the appendices for the exact areas in each activity

In terms of benefits: the scenario generally reflects the community's wishes; meets the anticipated demand for business and recreational activities in the area; responds well to the underlying natural hazards risks; and provides the opportunity for a financial return in the most desirable business areas.

In terms of assumptions, the overarching assumptions also apply.

2.1.3 Known Costs

The total capital cost (i.e. excluding ongoing maintenance costs) to the Council for implementing this scenario is estimated at between \$29.6 and \$33.2 million (for infrastructure / utilities and design and build costs for reserves).⁷ In addition, there will be significant third party costs (for land repair and other development) for the business areas depending on the activity proposed. For yard based retail these have been estimated as \$9.1 million, whereas for large format retail these costs have been estimated as \$34.9 million. This gives a total scenario capital cost of between \$38.7 million and \$68.1 million depending on the type of business activity chosen.

In terms of ongoing costs (e.g. maintenance), the anticipated costs for the Council for the Mixed Use Scenario is between \$234k and \$268k per annum. For the Crown the maintenance cost is \$160k per annum (for the whole regeneration area) until the land is divested.

There will be a return to the Crown as land owner from this scenario (e.g. business area sale; rural lease or sale); however these returns have not been calculated at this point.

No specific opportunity costs have been identified for the Mixed Use Scenario as this scenario is considered to represent the best land use approach, responding to locational benefits and constraints, community views, market demand and financial implications. Alternative land use options have however been identified within each sub area (e.g. Kaiapoi South); these are briefly described in the Options Analysis documents for each sub area.

2.1.4 Scoring Results

As set out in the appendices, this scenario achieved a score of 14 out of 16. This was the highest score of the eight scenarios assessed. This scenario scored well on all the criteria, particularly the 'best balance of regeneration objectives' and 'resilient' criteria.

2.2 Do Nothing Scenario (i.e. maintain the status quo)

2.2.1 Key Features

Under this scenario all the areas remain in their current state and use, i.e. 83.22 ha as private fenced grass and garden areas with no remediation or development and the Crown as land owner with

⁷ The infrastructure component will be apportioned based on the Council / Crown cost share agreement

ongoing management obligations. As such, the current access infrastructure and maintenance requirements would remain unchanged.

2.2.2 Key Issues

While this scenario is technically feasible it:

- Does not adequately meet the objectives set out in the Statutory Direction;
- Does not meet the aspirations of the community;
- Does not meet the pDRP goals;
- Does not meaningfully contribute to regeneration;
- Does not provide any certainty to the community; and
- Requires ongoing maintenance (approximately \$160k per annum).⁸

In addition there may be infrastructure costs associated with this scenario depending on whether or not 'do nothing' is interpreted as the removal of unnecessary horizontal infrastructure. This would need to be confirmed by the Council and the Crown.

2.2.3 Key Benefits

The key benefit is that this scenario requires very little or no capital investment. In addition, there are no intensive activities likely to be affected by future natural hazard events.

2.2.4 Known Costs

The financial costs for this scenario are limited to ongoing maintenance costs for the whole area of approximately \$160k per year, which is currently attributable to the Crown as landowner. It also has the highest opportunity cost of all the scenarios given the benefits attributable to the Mixed Use and other scenarios.

2.2.5 Assumptions

A key assumption required for this scenario is that the Crown is willing to retain ownership of the land in the long term and continue to pay maintenance costs with no financial return. However, based on the Minister's Direction this assumption is considered to be not well founded.

2.2.6 Scoring Results

As set out in the appendices, this scenario achieved a score of 4 out of 16. This was the lowest scoring scenario of the eight scenarios assessed, scoring a 1 (i.e. not met) for each of the four criteria assessed.

⁸ Based on figures supplied by the Crown

2.3 Residential Focus Scenario

2.3.1 Key Features

Under this scenario more area is provided for re-establishing residential activities in Kaiapoi East and Kaiapoi South than in the Mixed Use Scenario.⁹ Like the Mixed Use Scenario, residential development is enabled in the proposed business areas. Specific area changes are¹⁰:

- Kaiapoi East - less Greenspace area, less Rural area north of Cass Street (Areas 9, 10 and the area bounded by Cass Street and Feldwick Drive)
- Kaiapoi South - no Rural area west of Courtenay Drive (inner loop part of Area 5)

This scenario is technically feasible north of Cass Street and west of Courtenay Drive only. The remaining areas were discounted in the Technical Advisory Panel report due to flooding and geotechnical conditions.

2.3.2 Key Issues

The key identified issues are: the cost; timeframe and impacts on the local community and roads from undertaking the required remediation¹¹; the significant volume and uncertain source of the fill required to raise the level of the land; the potential impact of flooding on adjacent existing and new residents; the need for and associated cost of additional infrastructure; and amenity impacts of raising ground and floor levels on existing residents. In addition, investigations are being undertaken by the Crown to determine if the area is contaminated or not. If it is there will be an additional contamination remediation cost.

As set out in the appendices, the current advice received indicates a negative return to the Crown as landowner from this scenario based on current market conditions and land preparation costs.¹² Council advice indicates that currently there is ample residentially zoned land in better condition for development within the District. If there is no demand for residential activity at a price point that is economically viable the Crown would need to be a long term owner, contrary to the general assumption that the Crown does not wish this.

Finally, it is also noted that the community feedback on residential development in these locations was mixed, with some support and some opposition.

⁹ In the Mixed Use Scenario while residential development is enabled in the business area and not foreclosed in the rural area, 0 ha is expressly identified for residential only development. In the Residential Focus Scenario 25.29 ha is expressly made available for residential only development.

¹⁰ See the appendices for the exact areas in each activity

¹¹ See the T&T Engineering Feasibility of Potential Land Uses – Stage 1 Report, January 2016

¹² See the Colliers International Valuation Consultancy Report WDC Residential Red Zone Recovery Plan Kaiapoi, December 2015

2.3.3 Key Benefits

One key benefit accruing from this scenario is that it reinstates residential activity adjacent to green zone areas, thereby contributing to residential coherence and community cohesion. This was sought by a number of commenters through Canvas and on the pDRP. This scenario will also make use of the existing infrastructure, noting however that it will need significant repairs that have not currently been budgeted for in the Council's LTP.

Regarding the residential component providing a financial return to the Crown, as indicated earlier the current advice indicates an overall loss from the residential development proposed in this scenario. This is however heavily dependent on the actual repair costs, market demand and residential density re-established.

2.3.4 Known Costs

The total capital cost (i.e. excluding ongoing maintenance costs) to the Council for implementing this scenario is between \$27.1 and \$29.9 million (for infrastructure / utilities and design and build costs for reserves).¹³ This is slightly less than for the Mixed-Use Scenario as the Greenspace areas have decreased. In addition, there are significant third party costs (for land repair and other development costs) for the additional residential areas (\$40.4 million), with the same business area costs as the Mixed Use Scenario. This gives a total scenario capital cost of between \$77.2 million and \$105.2 million depending on business activity chosen.

In terms of ongoing costs (e.g. maintenance), the anticipated costs for the Council for the Residential Focus Scenario is between \$168k and \$182k per annum. This is slightly less than for the Mixed Use Scenario given the reduction in area. For the Crown the maintenance cost is \$160k per annum (across the regeneration area as a whole) until the land is divested.

There will be a potential return to the Crown as land owner from this scenario (e.g. residential area sale; rural lease or sale), however this has not been calculated at this point.

It should be noted that there are opportunity costs to this proposal relative to the Mixed Use Scenario. Specifically: the usable / effective area south of Cass Street is reduced due to an increased requirement for stormwater detention areas, potentially affecting the proposed dog park and BMX track; the rural areas are reduced, thereby reducing the potential return (from sale or lease) of these areas.

2.3.5 Assumptions

There are a number of specific assumptions associated with this scenario. It assumes houses being replaced at the same density as what was there originally, which averaged 671m² per section in Kaiapoi East and averaged 719m² per section in Kaiapoi South (approximately 10 houses / ha). It is noted however that residential development could occur at different densities such as low density

¹³ The infrastructure component will be apportioned based on the Council / Crown cost share agreement

(up to 4999m² for large lot residential sections) and medium density (generally around 300m² per section).

Secondly, given that residential development is proposed at the same density, it is assumed that development contributions will not be payable as these contributions are normally applied to new development, rather than reinstatement. It is assumed that the Crown will seek to divest the land for comprehensive land repair and development which is the most efficient approach. This scenario assumes the community will support it, whereas community views were mixed. This scenario assumes fill (for raising the land) can be obtained.

2.3.6 Scoring Results

As set out in the appendices, this scenario achieved a score of 9 out of 16. This was the second equal ranked scenario of the eight scenarios assessed, broadly meeting the ‘best balance of regeneration objectives’ and ‘resilient’ criteria. Lower scores for ‘optimises value for money’ and ‘practicality’ criteria were largely due to anticipated costs and uncertainty about these and the potential returns, the adverse effects on neighbours from land repair and that the areas may not develop in the short or medium term.

2.4 Business Focus Scenario

2.4.1 Key Features

This package involves increasing the area of the Kaiapoi commercial core (to 23.18 ha as compared to 7.32 ha in the Mixed Use Scenario) through further expansion of business activities into adjacent areas in Kaiapoi East, West and South.¹⁴ The specific area changes are:

- Kaiapoi East - less Greenspace, less Commercial Recreation (Areas 9, 15)
- Kaiapoi West - no Greenspace (Area 1)
- Kaiapoi South - less Heritage and Mahinga Kai, less Rural (Area 4, inner Courtenay loop of Area 5)

2.4.2 Key Issues

The key identified issues are similar to those identified for the Residential Focus Scenario. These are: the cost; timeframe and impacts on the local community and roads from undertaking the required land repair / remediation¹⁵; the significant volume and uncertain source of the fill required to raise the level of the land; the potential impact of flooding on adjacent existing and new businesses and residents; the need for and associated cost of additional infrastructure; and the amenity impacts of raising ground and floor levels on existing residents. It is noted however that if flood tolerant light weight structures and business activities are undertaken, such as yard based activities, then land repair costs, adjacent property flooding and other resulting issues could be reduced.

¹⁴ This represents a 146% increase on the current 15.9 ha Kaiapoi Town Centre

¹⁵ See the T&T Engineering Feasibility of Potential Land Uses – Stage 1 Report, January 2016

The proposal is likely to result in community concerns given the reduction in land proposed for recreation and mahinga kai activities, both of which were strongly supported by community comments, and the opposition by some commenters on yard-based business activities.

In addition, as set out in the appendices, the current advice received indicates a negative return to the Crown as landowner from a large format business type use, but a positive return from yard-based business uses principally due to the lower land repair and flood mitigation costs.¹⁶

The proposed business development would result in a significant expansion (by 146%) of the Kaiapoi Town Centre. This could undermine the existing town centre businesses and prove unsustainable from a demand and supply perspective. As with the Residential Focus Scenario, there could be soil contamination, however this could be better tolerated by business activities given the ability to cap contaminated areas with hard standing.

Depending on the activities undertaken there may be adverse effects (e.g. noise and traffic) on adjacent residential properties. Technical reports indicate that there is demand for additional business land, however this is over a period until 2043 and therefore will not meet the timely regeneration of the area – a key recovery objective.

2.4.3 Key Benefits

There is a potential return to the Crown depending on the actual land repair costs, market demand and business activity proposed. This scenario will make use of the existing infrastructure, however it will need significant repairs. Depending on activities enabled, this scenario could provide for the expansion of the Kaiapoi Town Centre or provide a supporting role.

2.4.4 Known Costs

The total capital cost (i.e. excluding ongoing maintenance costs) to the Council for implementing this scenario is between \$27.4 and 30.3 million (for infrastructure / utilities and design and build costs for reserves).¹⁷ This is slightly less than for the Mixed-Use Scenario as the Greenspace areas have decreased. In addition, there are significant third party costs (for land repair and other development costs) for the additional business areas depending on the activity proposed. For yard based retail these have been estimated as \$23.5 million whereas for large format retail these costs have been estimated as \$80.1 million. This gives a total scenario capital cost of between \$50.9 million and \$110.4 million depending on business activity chosen.

In terms of ongoing costs (e.g. maintenance), the anticipated costs for the Council for the Business Focus Scenario is between \$198k and \$219k per annum. This is slightly less than for the Mixed Use

¹⁶ See the T&T Engineering Feasibility of Potential Land Uses – Stage 1 Report, January 2016; and the Colliers International Valuation Consultancy Report WDC Residential Red Zone Recovery Plan Kaiapoi, December 2015

¹⁷ The infrastructure component will be apportioned based on the Council / Crown cost share agreement

Scenario given the reduction in area. For the Crown the maintenance cost is \$160k per annum (for the whole area) until the land is divested.

There will be a potential return to the Crown as land owner from this scenario (e.g. business area sale; rural lease or sale), however this has not been calculated at this point.

The reduction in land proposed for recreation and mahinga kai activities is an opportunity cost arising from this scenario; both of these land uses were strongly supported by community comments.

2.4.5 Assumptions

A key assumption is that the proximity to the Kaiapoi Town Centre will support these additional areas and that with appropriate activities (e.g. light industrial, trade retailing, large format retailing) the Kaiapoi Town Centre will not be undermined. It also assumes that the Kaiapoi area will remain in a high growth scenario.

2.4.6 Scoring Results

As set out in the appendices, this scenario achieved a score of 9 out of 16. This was the second equal ranked scenario of the eight scenarios assessed, broadly meeting the 'best balance of regeneration objectives' and 'optimises value for money' criteria. The lower scores for the 'practicality' and 'resilient' criteria were largely due to anticipated costs, the adverse effects on neighbours from land repair, the potential to undermine the Kaiapoi Town Centre and that the areas may not develop in the short or medium term.

2.5 Rural Focus Scenario

2.5.1 Key Features

The key features under this scenario are that approximately twice as much area (62.5ha) is set aside for rural activities in Kaiapoi South, East and Pines Beach. The specific area changes are:

- Kaiapoi South – less Heritage and Mahinga Kai (Area 4)
- Kaiapoi East – less Sports and Recreation, Recreation and Ecological Linkage and Cemetery (Areas 9, 10, 11)
- Pines Beach – less private lease and less Coastal Park (Areas 19, 20)

2.5.2 Key Issues

The key issues identified with this scenario are: possible additional adverse effects (e.g. smell) on adjacent residences (however this should not be significant given the proposed restrictions on intensive farming); the limited potential for small holdings; the potential opportunity costs; and a poor fit with the recovery objectives (e.g. reflecting the needs and aspirations of the community).

If this scenario was progressed, consistent with community feedback, access through and around the area would need to be retained.

2.5.3 Key Benefits

The key benefits of this scenario are the potential financial return through lease or purchase and the negligible infrastructure and remediation costs. As indicated in the appendices, valuation advice¹⁸ indicates there is rural lease demand and suggests a likely lease return of \$500 per ha per annum for cattle grazing. The return from sale for a rural-sized lot may realise a negative return given the costs of building platform repair / remediation relative to the likely sale return.¹⁹

In addition to a financial return, having certainty of activity in the rural areas will support social wellbeing and contribute to the community's recovery from the earthquakes although most people would not favour this option.

Another benefit is that this approach enables 'land banking', with a lease return in the interim should this be sought. However, if this land banking outcome was expressly sought this would need to be made clear in the Recovery Plan.

2.5.4 Known Costs

This scenario has not been costed. However it is anticipated that given the reduction in Greenspace and Heritage and Mahinga Kai Areas the capital and ongoing maintenance costs to the Council will be less than for the Mixed Use Scenario.

As identified in the issues section, there may be opportunity costs if this land could be better utilised for different purposes. The Council considers these additional areas can be better utilised for the activities proposed in the Mixed-Use Scenario and as such opportunity costs arise from the loss of Heritage and Mahinga Kai, Sports and Recreation, Recreation and Ecological Linkage, Cemetery and private lease areas. In terms of other activities such as residential or business, current technical and market demand advice indicates these activities are unlikely to be viable in these expanded rural areas in the short and medium term.

2.5.5 Assumptions

A key assumption is that there would be sufficient and ongoing demand for rural activities. This scenario also assumes that the Crown would be open to both sale and lease options for the rural land. However, it is understood that, based on the Minister's direction ongoing Crown ownership is unlikely and as such a lease approach is unlikely.

¹⁸ See the Colliers International Valuation Consultancy Report WDC Residential Red Zone Kaiapoi , May 2016

¹⁹ See the T&T Engineering Feasibility of Potential Land Uses – Stage 1 Report, January 2016; and the Colliers International Valuation Consultancy Report WDC Residential Red Zone Kaiapoi , May 2016

Any structures would be subject to planning and building rules, with dwellings at a density of one per 4 ha to meet the Waimakariri District Plan's existing rural zone residential density minimums. A lower site size such as 1-2 ha could be explored but this could require a bespoke district plan zone or resource consents.

It is also assumed that, in the absence of district plan changes, restrictions on intensive farming and residential density will be applied through the lease or sale agreements. Retaining the operative residential District Plan zoning would provide security if residential land banking was supported.

2.5.6 Scoring Results

As set out in the appendices, this scenario achieved a score of 6 out of 16. This was the second to lowest score of the eight scenarios assessed, scoring poorly on all four criteria. Key reasons for the lower score were that it undermined / precluded the activities proposed in the Mixed Use Scenario and did not provide a sufficient positive and active response to achieve the recovery objectives. It also is inconsistent with community comments which overwhelmingly supported more recreation opportunities in the residential red zone.

2.6 Commercial Recreation Focus Scenario

2.6.1 Key Features

In this scenario more area (31.59 ha in the Commercial Recreation Focus Scenario versus 1 ha in the Mixed Use Scenario) is provided for recreation activities run as commercial enterprises, either fully privately or as a joint venture with the Crown. Such activities could include: mini golf; a farm park; a BMX track; a purpose designed jet sprint facility; and the Kaiapoi golf course relocation. Specific area changes are:

- Kaiapoi East – no Rural area (Area 12)
- Kaiapoi South – no Rural area (Area 5)

2.6.2 Key Issues

The key issues associated with this scenario are the lack of private operator interest /demand to date to undertake these activities, a lack of certainty in delivery timing contrary to the Statutory Direction and a potentially poor fit with the recovery objectives (e.g. a lack of certainty and timely recovery). In addition, depending on activities undertaken, there could be adverse effects (e.g. noise, glare and traffic) on neighbouring green zone properties or remaining red zone residents.

It is worth noting that there are other areas available for commercial recreation in Kaiapoi (including in the residential red zone in Greenspace and Rural areas (through resource consent if necessary) and that commercial recreation activities may also occur in the Coastal Park.

2.6.3 Key Benefits

The scenario is technically feasible and could provide destination tourist attractions with associated 'spin offs' for the Kaiapoi Town Centre. If successful it could provide a return to the Crown as the landowner, either from lease or sale of land.

2.6.4 Known Costs

This scenario has not been costed. However it is anticipated that given the change in activity only applies to the Rural Areas the capital and ongoing maintenance costs to the Council will be comparable to the Mixed Use Scenario costs.

As stated in the issues section, there could be adverse effects arising on nearby residents, depending on the activities operating. There are few opportunity costs associated with this proposal relative to the Mixed Use Scenario as the activities displaced are only rural activities, which have an assessed low qualitative and quantitative value. In terms of other activities that could possibly occur in these areas such as residential or business, current technical and market demand advice indicates these activities are unlikely to be viable in the expanded commercial recreation areas in the short and medium term. It should be noted that commercial recreation opportunities are not foreclosed within the Mixed Use scenario, should there be third party interest in developing these.

2.6.5 Assumptions

This scenario assumes sustainable demand and supply for commercial recreation activities both now and in the future. However, no comments were received from commercial recreation operators during the Let's Plan consultation phase, and there has been only limited interest expressed by the public in such activities. This scenario also assumes that the Crown will be willing to contribute financially, which would need to be tested. It should be noted however that there has been no active pursuing of commercial recreation operators or opportunities.

This scenario assumes that the Crown would be open to both sale and lease options for the commercial recreation areas. However, it is understood that ongoing Crown ownership is unlikely and as such a lease approach is unlikely.

2.6.6 Scoring Results

As set out in the appendices, this scenario achieved a score of 8 out of 16. This scenario scored well on the 'meeting regeneration objectives' criterion, but scored poorly on the 'practicality' criterion principally due to lack of / uncertain demand for commercial recreation activities. Should demand arise then the scoring of this scenario would change accordingly.

2.7 Greenspace (Recreation) Focus Scenario

2.7.1 Key Features

In this scenario more area (56.5 ha in the Greenspace Focus Scenario versus 25.91 ha in the Mixed-Use Scenario) is set aside for Council Greenspace activities such as sports areas and neighbourhood parks. Specific area changes are:

- Kaiapoi East – more of existing activities, mixed active recreation, no Rural area (Area 12)
- Kaiapoi West – more of existing activities, the neighbourhood park could be managed with Murphy Park
- Kaiapoi South – more of existing activities, environmental space, food forest, eco-sanctuary, no Rural area (Area 5)

2.7.2 Key Issues

The key issues arising from this scenario are that it will exceed the required greenspace levels of service for the area and result in higher maintenance costs to the Council. Given Council budgets, the implementation will likely be 30-50 years, which means an interim use with Council management will be required. In addition, there will be no financial return to the Crown.

It is likely that some infrastructure decommissioning will be required (i.e. roads, 3 waters, Mainpower).

2.7.3 Key Benefits

A key benefit of this scenario is that, like commercial recreation, the additional Greenspace area could attract visitors to the area. In addition, some community aspirations, cultural and environmental goals are met, as are some recovery objectives such as: promoting community wellbeing (through physical activity such as walking, and experiencing nature).

2.7.4 Known Costs

This scenario has not been costed. However it is anticipated that given the significant expansion of the Greenspace Areas the capital and ongoing maintenance costs to the Council in calculated in the Mixed Use Scenario will increase accordingly.

There are few opportunity costs associated with this proposal relative to the Mixed Use Scenario as the activities displaced are only rural activities, which have a low qualitative and quantitative value. In terms of other activities that could possibly occur in these areas such as residential or business, current technical and market demand advice indicates these activities are unlikely to be viable in the expanded commercial recreation areas in the short and medium term. While this proposal provides more opportunities to link with the Kaiapoi River it is considered that given the significant linkages that already exist no additional benefit from this will accrue.

2.7.5 Assumptions

As for other proposed Greenspace areas this scenario assumes full divestment of the land at no or negligible cost to the Council and that the Council will maintain the land. It also assumes high and ongoing demand for significantly more Greenspace Recreation activities, which has not been

evidenced in the public feedback, nor supported by projections of demographics and demand in the Waimakariri district.

2.7.6 Scoring

As set out in the appendices, this scenario achieved a score of 8 out of 16. This scenario, scored well for the 'resilient' criterion, but poorly for the 'optimises value for money' criterion principally due to it exceeding the required greenspace levels of service for the area and higher maintenance costs to the Council.

2.8 Heritage and Mahinga Kai and Coastal Park Focus Scenario

2.8.1 Key Features

The key features of this scenario are: more area (relative to the Mixed Use Scenario) set aside for heritage and mahinga kai activities which could also include Heritage trails, Art, Sculpture Walk, Food Forest(s); and expansion of the coastal park westwards.²⁰ Specific area changes are:

- Kaiapoi South – extend further towards the Kaiapoi Town Centre and reduce the Rural area (Areas 3 and 5)²¹
- The Pines Beach and Kairaki - expand the coastal park area westwards (into Areas 23 and 19)²² or make these areas Heritage and Mahinga Kai areas²³
- Kaiapoi East - use parts of the area south of Cass Street along the northern bank of the Kaiapoi River (Areas 10 and 12)²⁴

2.8.2 Key Issues

A key issue arising from this land use scenario are opportunity costs (see the costs section below). Another key issue is the potential impacts (e.g. adverse amenity and further isolation) on remaining private residents from the extension of these areas in The Pines Beach and Kairaki.

In addition, there is no certainty around funding (although it is understood that additional funding arrangements are being investigated) and the implementation timeframe which could result in the areas remaining in interim uses for many years and / or not properly maintained. There is also uncertain demand and therefore the potential for underutilisation.

The exact nature of the management, governance and ownership of the additional heritage and mahinga kai areas has not been explored, although there have been suggestions of co-management. On-going management would be required as it is anticipated that the area would support a sustainable resource to be managed and eventually harvested.

²⁰ 31.79ha for the heritage and mahinga kai and coastal park focus scenario versus 15.33ha for these activities in the Mixed Use scenario

²¹ In their comments Ngai Tahu sought to extend the heritage and mahinga kai area to encompass Area 3

²² This has not been sought by Te Kohaka o Tuhaitara Trust

²³ This has not been sought by Ngai Tahu, nor considered by them

²⁴ This has not been sought by Ngai Tahu, nor considered by them

2.8.3 Key Benefits

The key benefits of this scenario are more opportunities for edible landscapes and education opportunities, slightly increased potential (over the Mixed Use Scenario) to improve the health of waterways and water quality and more support for the existing coastal park. It could also provide an opportunity to develop Kaiapoi as an exemplar destination for mahinga kai and ecological activities, which would encourage low key ecological tourism. Furthermore, there are more opportunities to also explore economic contributions.²⁵

It is important to note that many of the benefits identified are not precluded from occurring in other areas outside the red zone in the future, such as Corcoran Reserve and NCF Park.

2.8.4 Known Costs

This scenario has not been costed. However it is anticipated that given the significant expansion of the Heritage and Mahinga Kai and Coastal Park Areas the capital and ongoing maintenance costs for these areas relative to the Mixed Use Scenario will increase accordingly.

Opportunity costs arise for business activities and development of the Kaiapoi Town Centre if Area 3 is used instead for heritage and mahinga kai uses. These include loss of opportunity to extend / support the Kaiapoi Town Centre and possible loss of a financial return to the Crown. In addition, this would also foreclose on the Council's proposed car park and public transport interchange for this Area.²⁶ If parts of Kaiapoi East south of Cass Street along the northern bank of the Kaiapoi River were used for heritage and mahinga kai purposes, the activities planned for these locations (e.g. a BMX track and a dog park) could not occur or would need to be relocated elsewhere. For The Pines Beach and Kairaki, there would be a loss of the opportunity to purchase or lease these areas for private use.

2.8.5 Assumptions

Any land divested to the Council, Te Kohaka o Tuhaitara Trust, Ngai Tahu or another agency / organisation in this scenario is assumed to be at no or negligible cost. It is assumed that Ngai Tahu would support the proposed additional heritage and mahinga kai areas. It is also assumed that Te Kohaka o Tuhaitara Trust support would support the proposed additional coastal park areas and manage these. This has not been confirmed.

While the Council will contribute financially to the heritage and mahinga kai component in the Mixed Use Scenario, it has indicated that it will not financially support the additional heritage and mahinga kai areas proposed under this scenario. As such it is assumed that funding will need to be sourced elsewhere.

²⁵ It is noted however that there is potential to investigate opportunities to also explore economic contributions under the Mixed Use Scenario as well

²⁶ Area 3 is the preferred location for these activities given its proximity to the Town Centre and the Williams Street transport spine where public transport currently operates.

2.8.6 Scoring Results

As set out in the appendices, this scenario achieved a score of 9 out of 16. It scored well on the 'best balance of regeneration objectives' criterion principally due to a greater opportunity for enhanced social, cultural and environmental outcomes. This scenario scored poorly on the 'optimises value for money' principally because the establishment and ongoing funding sources are uncertain, noting that there already is a significant area set aside for this activity in the Mixed Use Scenario.

3.0 Summary and Conclusions

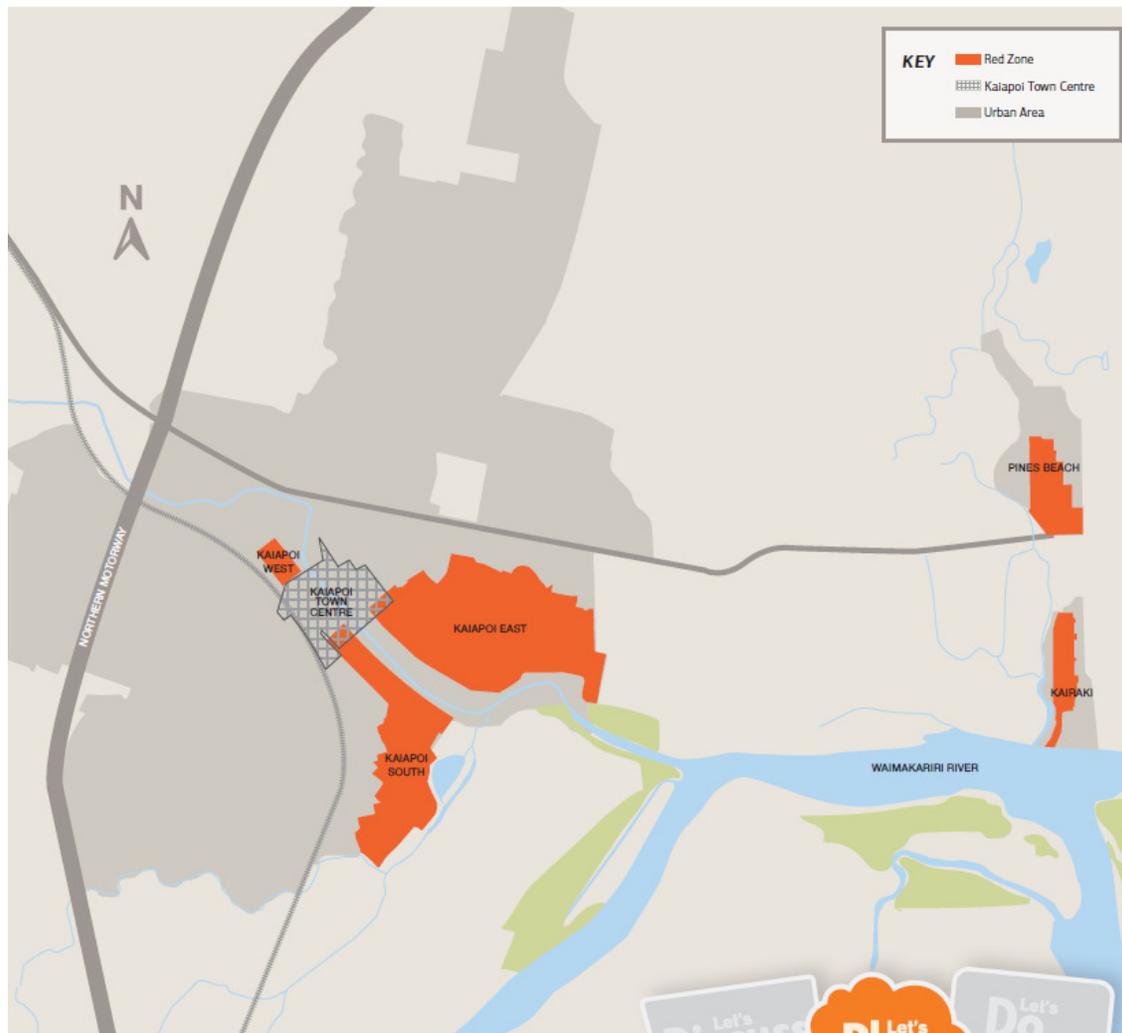
Eight land use scenarios were developed and assessed in terms of issues, benefits and costs and against four criteria. As set out in the appendices, the pDRP's preferred scenario (the Mixed Use Scenario) received the highest score, followed by the Residential and Business focus scenarios. The lowest ranked score was for the Do Nothing Scenario. The Mixed Use Scenario was considered to generally reflect the community's wishes, respond well to the underlying natural hazards risks, meet anticipated demand for business and recreational activities in the area and still provide the opportunity for a financial return in the most desirable business areas.

Of the three scenarios costed (Mixed Use, Residential Focus and Business Focus), the Mixed Use Scenario was the lowest cost overall, however the cost to the Council from this scenario was the highest given the larger Greenspace and Heritage and Mahinga Kai Areas relative to the other two costed scenarios. The financial returns from the proposed business and residential areas have not been included in this report. These will obviously offset the calculated costs, with a higher return for the Residential and Business Focus scenarios given the relatively larger areas for these activities in these scenarios, although with major uncertainties about timing and demand.

As set out in this report a number of assumptions have been made during the assessment of the scenarios. These have had varying degrees of influence on the assessment and scoring.

*Core Project Team
31/05/2016*

Appendix 1: Waimakariri Residential Red Zone Map



Regeneration Areas
Kaiapoi West, Kaiapoi East, Kaiapoi South,
Pines Beach, Hairaki

Appendix 2: Alternative Development Scenarios - Land Use Area (in Hectares)

Land area per land use type in alternative development scenarios

Land use*	pDRP - Mixed Use	Status Quo	Residential Focus	Business Focus	Rural Focus	Commercial Recreation Focus	Greenspace Focus	Heritage and Mahinga Kai and Coastal Park Focus
Greenspace	25.91	0	11.07	16.95	1.21	25.91	56.5	22.41
Business	7.32	0	7.32	23.18	7.32	7.32	7.32	4.35
Commercial Recreation	1	0	1	1	1	31.59	1	1
Rural	30.59	0	25.29	25.29	62.45	0	0	23.67
Heritage and Mahinga Kai and Coastal Park	15.33	0	15.33	13.73	10.04	15.33	15.33	31.79
Residential	0	0	20.14	0	0	0	0	0
Potential Private Lease (no permanent buildings)	3.07		3.07	3.07	1.2	3.07	3.07	0
Private Crown Land	0	83.22	0	0	0	0	0	0
Total	83.22	83.22	83.22	83.22	83.22	83.22	83.22	83.22

* excludes private residential properties within the red zone and WDC roading

Appendix 3: Development Scenarios Scoring Results

Criteria	Comments	Score
Do Nothing Scenario (Status Quo)		
1	Best balance of regeneration objectives - no reflection of active use, environmental (natural) services costs still incurred, and doesn't meet community expectations; would not meet any of the regeneration objectives	1
2	Optimises value for money - affordable to Crown at \$4.7million (maintenance costs), doesn't expose Crown or WDC to financial risk; no return to Crown; economically viable but not fiscally responsible; highest opportunity costs of all scenarios	1
3	Practicality - considers land damage, no remediation required; doesn't actively achieve regeneration outcomes	1
4	Resilient - does nothing for resilience, not responding to natural hazards for red and green zone land, continual land damage can occur, negative impact on green zone stormwater management opportunities, does not meet community views, objectives, and Minister's direction	1
		Total: 4
Mixed Use Scenario (Preferred)		
1	Best balance of regeneration objectives - range of aspirations and community views reflected – recreated, used, easy access, green, enables opportunities for ecological enhancement; not all of Ngai Tahu aspirations met, e.g. Area 3, but coastal park extended and other areas included as heritage and mahinga kai Area; supports Town Centre at this level, further business areas could compromise Town Centre; balancing act; best overall balance	4
2	Optimises value for money – considers whole of life costs, affordable over 20 year programme for WDC; higher cost of Mahinga Kai area however; provides opportunity for financial return for the Crown (assumption that WDC and Crown don't want to be landowner for some areas); low opportunity costs	3
3	Practicality - scenario is a pragmatic, balanced and timely approach to regeneration (staged over 20+ year period but some quick wins e.g. rebuild roads), which considers demand evidence and land conditions; impact on current and future land owner is still quite speculative; the efficient implementation and management hinges on Crown divesting land at no cost, managing small private leases is not very efficient	3
4	Resilient – a strong feature is balance; heavily reliant on TAP report and consistent with it; considers and influenced by reverse sensitivity issues, particularly for green zone; some divergent community and stakeholder views e.g. business areas, sports fields	4
		Total: 14
Residential Focus Scenario		
1	Best balance of regeneration objectives – additional housing provision, community growth; same cultural and economic outcomes as mixed use scenario - no net gain from regeneration perspective; some negative environmental impacts, particularly during construction (e.g. fill, traffic) and long-term consequential impacts	3
2	Optimises value for money – consequential flooding risk introduced from displacement of stormwater which is not fully budgeted for; no prospective financial return given land repair costs and lack of current demand, however future technology and demand changes may make it more economically viable; given affordability, uncertainty could exposure Crown to significant financial risk; some opportunity costs for recreation activities	2
3	Practicality – not pragmatic or timely, rather is long term (may not be developed for 20 years) and persistent uncertainty; considers land damage and flooding, the costs of remediation and impacts on green zone, avoids lateral spread areas; impacts on surrounding land owners due to land repair work, some uncertainty; no evidence of demand, but could theoretically work	2
4	Resilient – provides for future growth of Kaiapoi but precludes greenspace sport and recreation; further work needed to ascertain natural hazard requirements (particularly flooding); temporary green zone impacts over 5 years from land repair; some community and stakeholder support and some opposition	3
		Total: 10
Business Focus Scenario		
1	Best balance of regeneration objectives –less greenspace, less recreation and less heritage and mahinga kai areas, therefore contributes less to community and cultural wellbeing; supports business growth (increases Kaiapoi Town Centre by 23.18 ha – a 146% increase) but questionable where growth coming from and could potentially adversely impact on existing Town Centre; potential for negative environmental impacts on neighbours and river quality	3
2	Optimises value for money – more significant remediation costs, more infrastructure costs, consequential impacts on flooding, unclear who pays for this; in theory a relatively high financial return to the Crown - best opportunity assuming Crown willing to invest; potential high financial risk to WDC depending on infrastructure costs, possible impact on rates, dependent on divestment and whether Crown expected to provide remediated land before passing on for sale, given large scale; questionable market demand, and	3

	possible negative impacts on existing KTC; precludes other uses in these areas so opportunity cost; some opportunity costs for recreation and mahinga kai activities	
3	Practicality – is possible but not pragmatic given land repair and flood mitigation requirements with associated potential reduction in development potential; potential impact on Crown, WDC and developers; uncertainty around timing; not efficient, lots of obstacles and potential impact on existing KTC	2
4	Resilient – current and future needs considered – there are better locations in District for business activities; not the best use of land given identified natural hazards constraints; doesn't integrate with KTC and surrounding areas and uses as could undermine it and create reverse sensitivity effects; no strong community or stakeholder view on extending business area, rather some sought a reduction;	2
		Total: 10
Rural Focus Scenario		
1	Best balance of regeneration objectives – negative for social and cultural; less heritage and mahinga kai, less sports and recreation, less private lease in Pines Beach; high opportunity cost, poor fit with recovery objectives	1
2	Optimises value for money – income known and some return but not highest and best use; high opportunity costs; low cost to maintain; other ways of meeting demand in District; opportunity costs for recreation, mahinga kai and cemetery	2
3	Practicality – do-able but not efficient, timely, or regenerating	2
4	Resilient – doesn't respond to community views or needs, doesn't integrate with surrounding areas and uses	1
		Total: 6
Commercial Recreation Focus Scenario		
1	Best balance of regeneration objectives – Rural areas disappear, other elements of package respond to regeneration objectives	3
2	Optimises value for money – no investor demand but not marketed to date by WDC; partially meets aspirations; uncertainty around demand; questionable viability of potential types of activities in these locations; few opportunity costs	2
3	Practicality – not efficient due to uncertainty	1
4	Resilient – kids would love it; high opportunity cost for other activities; does respond to some aspirations; some potential negative effects (reverse sensitivity)	2
		Total: 8
Greenspace (Recreation) Focus Scenario		
1	Best balance of regeneration objectives – park like, but implementation over 30 years	2
2	Optimises value for money – above level of service for Greenspace; unclear funding model for delivery; opportunity costs arise; few opportunity costs	1
3	Practicality – considers land damage but not practical as not timely nor efficient due to greenspace oversupply	2
4	Resilient - community feedback for both smaller and larger areas of greenspace; supports health and wellbeing community outcomes, enhances park-like area of river frontage; no additional benefit over existing and Mixed Use option	3
		Total: 8
Heritage and Mahinga Kai and Coastal Park Focus Scenario		
1	Best balance of regeneration objectives – area still available for community use supporting wellbeing, however could compromise some recreational use (e.g. potentially forecloses BMX track and dog park, cemetery areas), and limits business opportunities in key strategic locations; more heritage and mahinga kai area that Ngai Tahu originally sought, but they do support extension; reduces other opportunities for business and employment; greater opportunity for enhanced environmental outcomes	3
2	Optimises value for money – uncertain affordability as funding sources unknown but being investigated – could be a financial risk; unlikely to be a financial return to the Crown; may be market demand for commercial activities in the coastal park area; over long-term benefits could accrue to other areas, including water quality of river; potential for economic value from eco-tourism, education opportunities and bio-prospecting; opportunity costs for Area 3 (e.g. no car parking or public transport interchange), and Kaiapoi East (need to relocate BMX track and dog park), and loss of lease option in Kairaki and The Pines	1
3	Practicality – not timely as very long term project; considers land damage and remediation feasibility; high uncertainty over impact on current and future landowner – could be high; could be inefficient as management structure required and is uncertain	2
4	Resilient – responds to some needs but uncertain demand, therefore potential for under-utilisation (area larger than originally sought by Ngai Tahu); accounts for natural hazards; can integrate well with surrounding areas; reflects some community needs but precludes other strongly supported activities (dog park and BMX) in this location; creates opportunity cost for other activities	3
		Total: 9