



# INTEGRATED ASSESSMENT: A GUIDE

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## ACKNOWLEDGEMENTS

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- Canterbury Regional Council (Environment Canterbury)
- Canterbury District Health Board
- Canterbury Earthquake Recovery Authority
- Christchurch City Council
- Lyttelton Port Company
- Regenerate Christchurch
- SA Health, Government of South Australia
- Te Ngāi Tūāhuriri Rūnanga
- Waimakariri District Council.

## EXECUTIVE SUMMARY

Integrated assessment is a new tool that joins the current suite of impact assessment tools. Like all impact assessments, the aim of integrated assessment is to assess the potential outcomes of strategies, policies and plans while they are still in draft form ahead of their approval and implementation (here, broadly termed 'draft proposals'). The assessment identifies the changes authors need to make to a draft proposal to achieve its desired outcomes.

The key characteristics of integrated assessment are that it:

- has a proven record of use across draft strategic, policy and planning documents
- follows a process that engages diverse stakeholders (multi-agencies, cross-discipline professionals and affected communities)
- frames assessment around the aims of the draft proposal, other relevant strategies and planning documents, and expectations of decision makers
- develops bespoke assessment criteria that give equal weight to cultural, social, environmental and economic decision-making groupings
- provides clear direction to proposal authors about how to improve the draft proposal
- makes it possible to check the draft proposal aligns with a set of objectives and/or compare two or more proposal alternatives.

The following are the seven key steps of integrated assessment.

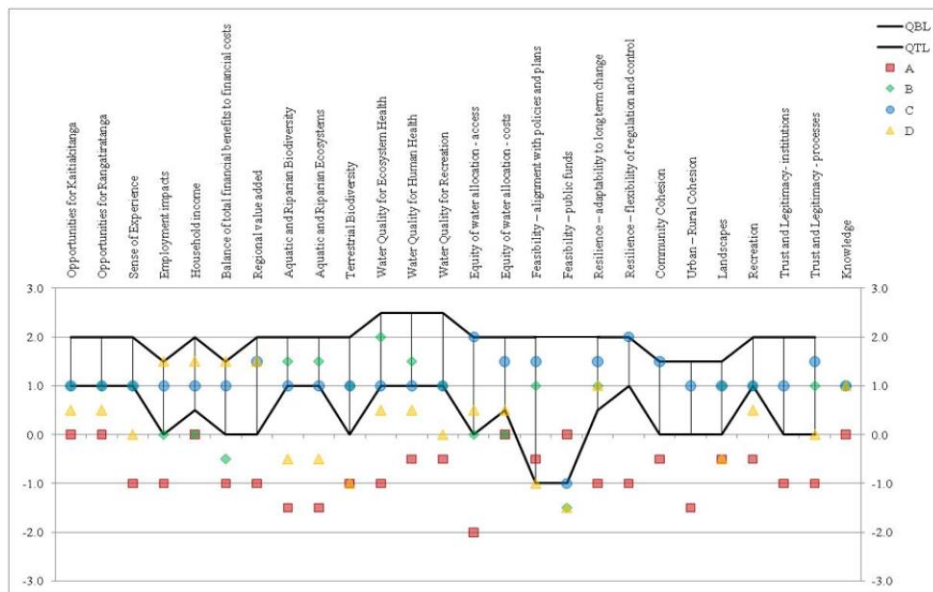
1. **Scope the assessment.** This step identifies the draft proposal to assess, confirms decision makers are committed and proponents and/or agency staff are available to participate, musters resources (for example, personnel, budget), checks the timeline and establishes the assessment frame. The team to undertake the assessment typically represents the agencies involved and includes at least one practitioner, consultant or staff member experienced in integrated assessment who can oversee the assessment. A budget for consultant time is required unless the team has previous experience.
2. **Prepare *draft* assessment criteria within the assessment team.** The team develops up to 40 draft assessment criteria, covering cultural, social, environmental and economic matters. It uses the objectives of the plan as the basis for this work and may be guided by existing statutory and non-statutory documents, such as frameworks like the Sustainable Development Goals, together with relevant national, regional, local strategies and plans.  
Each criterion has scale steps. Each scale step describes what the draft proposal will achieve, using a consistent active verb. Scale steps are typically marked –1 to +3, or –2 to +2, for ease of future scoring. A neutral position (0, little or no change) is also included.
3. **Workshop one tests the draft criteria and sets the top and bottom lines.** Selecting workshop participants is a critical step, with recruitment focusing on an individual's knowledge and experience rather than on achieving organisation or agency representation. The combined knowledge and expertise of participants should cover all matters to be assessed and represent the locations and communities potentially affected. Participants should include professional disciplines and local communities. New Zealand integrated assessments have always included mana whenua and may include Pasifika, migrants, heritage, youth and other 'hard-to-reach' groups.

Workshop one introduces the diverse participants to the process and invites them to review the draft criteria for completeness and clarity. In strategically allocated pre-assigned groups, workshop participants amend their group's criteria, description and scale steps. This is an iterative and discursive process. Workshops generally involve a group working on each of the four pillars (so 30 to 60 people in a workshop). Facilitators and an assessment team manage the whole process, take notes and lead conversations around the four tables or wall charts. Many participants have wide interests and an ability and wish to contribute to more than one group, so participants also have time to circulate to review the work of other groups and add value it.

The second task of workshop one is to discuss and set the top and bottom line positions. The bottom line position is an agreed safe minimum for resource use or minimum achievement level for a service. The top line position is an aspirational or desirable upper limit. This step should be supported by professionals who are familiar with the content of technical reports and higher-level planning documents. However, both of these workshop tasks are completed without detailed reference to the draft proposal that is to be the subject of the assessment.

4. **Workshop two assesses the draft proposal against the agreed criteria.** In the same groups as workshop one, participants assess (test/score) where the draft proposal sits on the scale steps for each of their group's criteria. The draft proposal can be circulated before the workshop but, if not, the workshop must include time for participants to get a good understanding of content. It is essential that each group has access to someone with a comprehensive knowledge of the draft proposal so that it bases its decisions on a full understanding of that proposal. Comprehensive note-taking is useful as the discussion that leads to the scoring decisions is usually rich in information that will aid proposal authors.
5. **Optional additional workshop re-applies the criteria to a more advanced draft, if needed.** Three of the seven case studies of using the tool (to date) have run an additional workshop, which proved valuable in developing their spatial and resource plans. In other case studies, this step was not required or not appropriate.
6. **Write up and report.** When compiled, the assessed and scored criteria provide an overall picture of how the proposal 'measures up'. Individual scores of criteria provide guidance on aspects of the draft proposal. The example below presents the results of the assessment of *four* draft Canterbury Water Management Strategy options (the scores of the four options are represented by different coloured dots). Across the top are the criteria and beneath each are four scoring marks (against the scale –3 to +3). The black lines are the top and bottom line positions for each criterion. Option C (blue dots) scores considerably higher than any of the others and indeed this was the option that decision makers chose to proceed with. Such graphics greatly assist proposal authors and decision makers.

## Example: Criteria, top and bottom lines, and scoring of four proposal options



- 7. Evaluation.** Evaluating the tool's process and outcomes is good practice. Independent process evaluation has been completed on three of the integrated assessments reported here. The results have guided subsequent methodological development and demonstrate the value of the tool to potential users.

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## 1. INTRODUCTION

Integrated assessment, a new impact assessment tool, has been applied to good effect over several years across a range of plan types. As the tool has gained acceptance and a professional following, and as practitioners have grown increasingly familiar with it, its wider use is now warranted with the aim of improving resource and spatial planning to achieve multiple community benefits. Its ongoing use in Canterbury, New Zealand, particularly following the 2010–2012 earthquake sequence, was of immense value to planners and decision makers in formulating recovery plans to guide land use decisions and more closely involve the affected communities.

### 1.1 WHAT IS INTEGRATED ASSESSMENT?

Integrated assessment is a structured way to predict the potential effects of a strategy, policy or plan during early iterations (here, broadly termed a ‘draft proposal’) and recommends ways to improve the draft proposal. It focuses on the four pillars of sustainability – social, economic, cultural and environmental – and provides a process to truly engage multiple agencies, stakeholders and potentially affected communities.

This tool responds to the evolving need for more collaborative multi-agency and cross disciplinary approaches to solving complex or ‘wicked’ problems. Involving a wide range of perspectives and expertise at the early phases of the development of plans can lead to long-term efficiencies and better outcomes for the environment and communities.

Integrated assessment is firmly grounded in the impact assessment tradition as a prospective tool to use with draft proposals. One identifying feature is that it involves multiple assessment criteria, but importantly they are all of equal weight. The assessment criteria are developed bespoke for each assessment, based on the vision and objectives set for the particular activity and reflecting the existing regulatory framework of policies, plans and strategies, ranging from global through to local, that apply to it. This approach ensures a clear ‘line of sight’ through the planning or policy framework and so ensures the draft proposal aligns with policy and the expectations of the community and decision makers.

Although it is based on the sustainability appraisal and has a clear four-pillar approach as the foundation, the generic label for the tool is ‘integrated assessment’ to emphasise that it is an adaptable framework and avoid any initial uncertainty around the term ‘sustainability’.

In the seven case studies that underpin this guide, the use of the integrated assessment tool was a success because it:

- was introduced early in the process and engaged participants before they were committed to a particular course of action
- involved proposal authors and those advising decision makers early, so they were open to ideas from participants rather than defending the proposal
- used pre-established criteria, which provide a clear line of sight back to governing plans and strategies

- is an efficient way of testing early ideas and draft plans, in terms of time, resourcing and budgets, and clarifies issues and plan drafting priorities before formal public consultation and decision making begin
- is useful to inform decision making and offer a defence against challenges, whether the issues involved are legal or political, and whether they are coming from the community or others.

## 1.2 ABOUT THIS GUIDE

*Integrated Assessment: A guide* describes the tool and sets out the steps needed to undertake it successfully. It draws on lessons learned from seven case studies where the tool has been used previously.

The guide is for policy makers, planners and impact assessment specialists to use when they are seeking to improve the quality of draft proposals. The Executive Summary may be a useful resource for busy managers or others that need to be convinced of the benefits of such a process.

Reflecting its place of origin, the tool provides for the inclusion of New Zealand's indigenous mana whenua, 'the people of the land', in the process or in a parallel independent assessment process.

## 1.3 HISTORY OF DEVELOPMENT AND USE OF INTEGRATED ASSESSMENT

Integrated assessment was originally developed in Canterbury, New Zealand, based on a sustainability appraisal think piece by Barry Sadler and Martin Ward in 2008. After the tool was successfully trialled with central and local government agencies, the Canterbury Regional Council commissioned its first application to the draft Canterbury Water Management Strategy. For over a decade since then, it has been used to support both statutory and non-statutory proposals.

The third actor in the methodology's development was consultant Robert Quigley. While consulting with the Government of South Australia's Department of Health, he recognised the potential of the approach to support community health and wellbeing. From the same perspective, the Canterbury District Health Board's Community and Public Health service quickly and strongly supported its use in Canterbury, contributing funding and staff resources to facilitate and evaluate it.

Following the change of New Zealand Government in 2011, the terms 'sustainability' and 'sustainable development' were removed from the public service lexicon. Funding also ceased for sustainability-related activities. However, the novel and effective routines of the sustainability appraisal methodology appealed to some New Zealand professionals, who used them in the following applications:

1. Sustainability Appraisal of the Canterbury Water Management Strategy, 2009
2. Wellbeing Assessment of the Castle Plaza Development Plan Amendment, South Australia, 2011
3. Sustainability and Wellbeing Assessment of the Draft Christchurch Central City Plan, Canterbury, 2012
4. Integrated Assessment of the Draft Land Use Recovery Plan, 2013
5. Wellbeing Impact Assessment of the Draft Lyttelton Port Recovery Plan, 2014
6. Integrated Assessment of the Draft Waimakariri Residential Red Zone Recovery Plan, Canterbury, 2015

## 7. Integrated Assessment of the Ōtākaro/Avon River Corridor Regeneration Plan, Christchurch, 2018.

The variety of labels for the assessments reflects the differences in the focus of the funding or commissioning agencies, not a variation in the method. That the method was applied in such diverse contexts also underlines its flexibility.

Legislation has supported use of the tool. The Recovery Strategy for Greater Christchurch: Mahere Haumanutanga o Waitaha, developed under the Canterbury Earthquake Recovery Act 2010 (since repealed), stated that Government-led recovery programmes should use appropriate impact assessment. The three recovery plan assessments flowed from this requirement. The tool also helped meet the Greater Christchurch Regeneration Minister's requirement to show how consultation had influenced the development of plans.

Co-authors Karen Banwell and Stephen Timms were involved in the assessments required by statute (as above). Through their previous experience of environmental and health impact assessments in various jurisdictions, they recognised the potential of the tool to strengthen the process of preparing plans, particularly with communities sensitive to change.

The assessment for Regenerate Christchurch as part of the Ōtākaro/Avon River Corridor Regeneration Plan arose from the tool's reputation for effectively contributing to the planning process.

In three cases where the tool has been used, staff at the Canterbury District Health Board have conducted a formal independent evaluation of the process and outcomes. These evaluations have confirmed the tool adds value to plan development and improves practice.

### 1.4 INTEGRATED ASSESSMENT – AN OVERVIEW OF THE BASIC STEPS

The key steps in the integrated assessment process are as follows.

1. Scope the assessment – establish what is being assessed and when, using what framework and with what resources.
2. Prepare draft assessment criteria – develop assessment criteria and scale step descriptions.
3. Workshop one: Discuss and agree draft criteria and scale steps and set the top and bottom lines.
4. Workshop two: Assess the draft proposal against the developed criteria.
5. Optional workshop three: Re-apply the criteria to a further iteration of the draft proposal, if helpful.
6. Write up and report.
7. Evaluate the use of the tool in terms of both process and outcomes.

The following sections describe each of these steps in more detail.

## 2. THE ASSESSMENT PROCESS: SCOPE THE ASSESSMENT

The scoping stage underpins the integrated assessment process by identifying the draft proposal to be assessed. Once decision makers have confirmed their support and the authors of the draft proposal have confirmed the staff and time commitment involved, the assessment can begin. Like any impact assessment, the scoping stage determines the resources needed and who will be involved, as well as confirming the timeframe for completing the draft proposal (prior to decision making). In contrast to most other impact assessments, which have a statutory or institutional frame, integrated assessment identifies a project-specific frame to underpin the development of the assessment criteria. This is a crucial difference as it allows each assessment to be developed bespoke to the objectives of the proposal and its location.

### 2.1 FRAME THE ASSESSMENT

The principal decision in the scoping stage involves selecting the assessment frame – *what is the draft proposal to be assessed against?* In the earliest application of this tool, a rather imprecise ‘sustainability’ frame was agreed, from which groups of assessment criteria were assembled under four sustainability pillars: cultural, social, economic and environmental. A process category was added later. While some subsequent applications have used those four pillars, others have used different groupings.

Below are four examples of how frames have been set and used. Note the diversity of potential criteria against which assessment is made, driven by the planning purpose itself rather than the tool.

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#### 2.1.1 DRAFT CHRISTCHURCH CENTRAL CITY PLAN

Following the destructive and deadly Canterbury earthquake sequence of 2010–2012, which saw more than half of the central city buildings demolished, the New Zealand Government gave the Christchurch City Council a limited mandate to quickly prepare a draft plan for a future city centre. The Council agreed that five principles (Appendix 1), which Christchurch city councillors defined as vital to creating a vibrant and prosperous city, would guide the planning process.

The Christchurch City Council and the Canterbury District Health Board commissioned and jointly funded an integrated assessment. The purpose was to test (assess) the draft plan’s compliance or alignment with the planning objectives, in this case the guiding principles. As Example 1 outlines, the assessment team (including representatives of the commissioning agencies) developed assessment criteria and assigned each of them to one of four pillars (for operational convenience).

### Example 1. Overview of the assessment of the draft Christchurch Central City Plan

Frame	Assessment criteria				
The five principles for rebuilding a vibrant and prosperous city	A total of 40 criteria, split among social, cultural and economic and environmental pillars				
<p>Example. Two of the five principles are set out below:</p> <p>1. A long-term view of the future</p> <ul style="list-style-type: none"> <li>• Build-in safety and resilience to withstand natural disasters and climate change.</li> <li>• Promote a green and sustainable garden city.</li> <li>• Support a complementary balance between the central city and suburban centres.</li> </ul> <p>2. Easy to get around</p> <ul style="list-style-type: none"> <li>• Promote a city that is easy and safe to get around.</li> <li>• Support a balance between walking, cycling, public transport and driving.</li> </ul> <p>It is easy to see how such principles might inform and provide guidance on what to assess. These principles led to 40 criteria in four pillars. For example, the principle <i>'Build in safety and resilience to withstand natural disasters and climate change'</i> fed into the 'social' pillar; and led to a specific criterion for assessment: <i>'Safety and resilient buildings: Build in safety and resilience to withstand natural disasters and climate change'</i>. The 40 criteria in four pillars are below.</p> <div data-bbox="311 963 1268 1601"> <table> <tr> <td> <p><b>Social</b></p> <ul style="list-style-type: none"> <li>• Community involvement</li> <li>• Affordable housing</li> <li>• Safety and resilient buildings</li> <li>• Crime and injury prevention</li> <li>• Equity – demographic diversity</li> <li>• Accessibility and way finding</li> <li>• Community facilities and services</li> <li>• Balance between centre and city</li> </ul> </td><td> <p><b>Economic</b></p> <ul style="list-style-type: none"> <li>• Employment</li> <li>• Retail and office space and mix</li> <li>• Precincts</li> <li>• Business hubs</li> <li>• Transport</li> <li>• Education, research, training</li> <li>• Communication technologies</li> <li>• Neighbourhood centres</li> <li>• Food security and availability</li> </ul> </td></tr> <tr> <td> <p><b>Cultural</b></p> <ul style="list-style-type: none"> <li>• Maori values</li> <li>• Sense of place</li> <li>• Heritage</li> <li>• Remembrance</li> <li>• Historic Street pattern</li> <li>• Diversity and vibrancy</li> </ul> </td><td> <p><b>Environmental</b></p> <ul style="list-style-type: none"> <li>• Green spaces</li> <li>• Green buildings</li> <li>• Stormwater management</li> <li>• Renewable energy</li> <li>• Multi-use public spaces</li> <li>• Celebrating the Avon River</li> <li>• Urban design and aesthetics</li> </ul> </td></tr> </table> </div>		<p><b>Social</b></p> <ul style="list-style-type: none"> <li>• Community involvement</li> <li>• Affordable housing</li> <li>• Safety and resilient buildings</li> <li>• Crime and injury prevention</li> <li>• Equity – demographic diversity</li> <li>• Accessibility and way finding</li> <li>• Community facilities and services</li> <li>• Balance between centre and city</li> </ul>	<p><b>Economic</b></p> <ul style="list-style-type: none"> <li>• Employment</li> <li>• Retail and office space and mix</li> <li>• Precincts</li> <li>• Business hubs</li> <li>• Transport</li> <li>• Education, research, training</li> <li>• Communication technologies</li> <li>• Neighbourhood centres</li> <li>• Food security and availability</li> </ul>	<p><b>Cultural</b></p> <ul style="list-style-type: none"> <li>• Maori values</li> <li>• Sense of place</li> <li>• Heritage</li> <li>• Remembrance</li> <li>• Historic Street pattern</li> <li>• Diversity and vibrancy</li> </ul>	<p><b>Environmental</b></p> <ul style="list-style-type: none"> <li>• Green spaces</li> <li>• Green buildings</li> <li>• Stormwater management</li> <li>• Renewable energy</li> <li>• Multi-use public spaces</li> <li>• Celebrating the Avon River</li> <li>• Urban design and aesthetics</li> </ul>
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#### 2.1.2 CASTLE PLAZA DEVELOPMENT PLAN AMENDMENT

In 2010, the *30-Year Plan for Greater Adelaide* was adopted to help concentrate development growth in both existing and new suburbs around dedicated public transport corridors. It embodied higher residential density and mixed-use commercial hubs known as transit-oriented developments (TODs).

Around the same time, planning for a large ‘brownfields’ development in the City of Marion, called Castle Plaza TOD, was nearing a conclusion with a draft Castle Plaza Development Plan Amendment released for community consultation.

The City of Marion and the Government of South Australia’s Department of Health recognised that the redevelopment provided an ideal opportunity to trial the application of the ‘Healthy TOD’ principles. They engaged New Zealand consultants, who used an integrated assessment approach to test whether the Castle Plaza Development Plan Amendment would deliver the diverse Healthy TOD principles (Appendix 2). Example 2 summarises the assessment process.

#### Example 2. Overview of the assessment of the draft Castle Plaza Development Plan Amendment

Frame	Assessment criteria					
Healthy transit-oriented development principles	A total of 38 criteria, split among groupings of: Workplace access and amenity; Healthy environments; Physical activity; Sustainability and vibrancy; Mental health and wellbeing; Social inclusion and cohesion; Sense of place; Accessible public transport; Climate change mitigations; and Access to healthy food.					
<p>Example. Two of the five principles are set out below:</p> <ol style="list-style-type: none"> <li>1. Sustainable and vibrant Adelaide Mixed-use development that incorporates the integration of medium-high density housing and retail/commercial premises.</li> <li>2. Social inclusion: Supporting an inclusive and diverse community Access to housing choice and affordability in which design is not compromised. Flexible building design that can cater for a changing demographic profile over time, such as housing for the aged to housing for families.</li> </ol> <p>Again, such principles guide what to assess. These principles led to 10 groupings and 38 criteria. For example, the principle ‘<i>Flexible building design...</i>’ fed into the ‘social inclusion and cohesion’ grouping; and led to two specific criteria for assessment: ‘<i>Affordable housing; and Housing tenure</i>’. Below are all four criteria within the ‘social inclusion and cohesion’ grouping (see Appendix 2 for all 38 criteria in their 10 groupings).</p> <table border="1"> <tr> <td rowspan="4">Social inclusion and cohesion</td><td>Building design and flexibility</td></tr> <tr> <td>Affordable housing</td></tr> <tr> <td>Housing tenure</td></tr> <tr> <td>Inclusive design process</td></tr> </table>		Social inclusion and cohesion	Building design and flexibility	Affordable housing	Housing tenure	Inclusive design process
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#### 2.1.3 DRAFT CANTERBURY WATER MANAGEMENT STRATEGY

In early 2009 the Canterbury Regional Council (known as Environment Canterbury) sought to draw together several loosely coordinated studies addressing the long-term management and use of fresh water in the region. The goal was to produce the long-term Canterbury Water Management Strategy. At that time, a number of rivers were near or beyond sustainable flows due to over-allocation of water for irrigation and concerns were rising about loss of water flow for passive and

active recreational use. In addition, monitoring testing showed increased nitrate levels in surface and ground water.

The Council commissioned Martin Ward to undertake a sustainability appraisal. This appraisal, completed with the assistance of Barry Sadler, became the founding application of what has become the integrated assessment process. It sought to test the sustainability of the following four draft strategies to manage Canterbury's water resources:

1. Continue to improve the current approach to water management.
2. Advance environmental protection before developing significant infrastructure.
3. Reconfigure consents and infrastructure for protection and repair of the environment, improved reliability of supply, and development.
4. Advance infrastructure with strong requirements for environmental repair and protection.

The draft Canterbury Water Management Strategy was, at that time, without clear or agreed objectives. Without a frame to guide the assessment, a group of experts was brought together to agree a generic but Canterbury-oriented set of criteria based on the assets involved in planning for and 'using' water. Example 3 summarises the assessment process; Appendix 3 sets out the pillars for which the group agreed assessment criteria were needed.

### Example 3. Overview of the assessment of the draft Canterbury Water Management Strategy

Frame	Assessment criteria								
No frame existed	A total of 52 preliminary assessment criteria, split among pillars of: Social (human and social), Cultural, Economic (produced and financial) and Environmental (natural).								
<p>The final 40 assessment criteria included 10 recognisably Māori-related criteria, which are significantly and correctly distributed across the pillars, rather than all set in the cultural pillar. Again, these criteria underpinned what to assess. Below are selected examples (see Appendix 3 for all 52 preliminary assessment criteria).</p> <table> <tr> <th>Social (human and social)</th><th>Economic (produced and financial)</th></tr> <tr> <td>Trust in institutions/processes Sense of community/place Whanaungatanga</td><td>Irrigated land Irrigable land Public finance Private finance Ngāi Tahu finance</td></tr> <tr> <th>Environmental (natural)</th><th>Cultural</th></tr> <tr> <td>Groundwater free from contaminants Mauri (natural state of being) Reserve land (Department of Conservation estate) Native birds in sustainable populations</td><td>Regional identity Whakapapa Sense of belonging Monuments and historical sites</td></tr> </table>		Social (human and social)	Economic (produced and financial)	Trust in institutions/processes Sense of community/place Whanaungatanga	Irrigated land Irrigable land Public finance Private finance Ngāi Tahu finance	Environmental (natural)	Cultural	Groundwater free from contaminants Mauri (natural state of being) Reserve land (Department of Conservation estate) Native birds in sustainable populations	Regional identity Whakapapa Sense of belonging Monuments and historical sites
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Groundwater free from contaminants Mauri (natural state of being) Reserve land (Department of Conservation estate) Native birds in sustainable populations	Regional identity Whakapapa Sense of belonging Monuments and historical sites								

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#### 2.1.4 DRAFT LAND USE RECOVERY PLAN

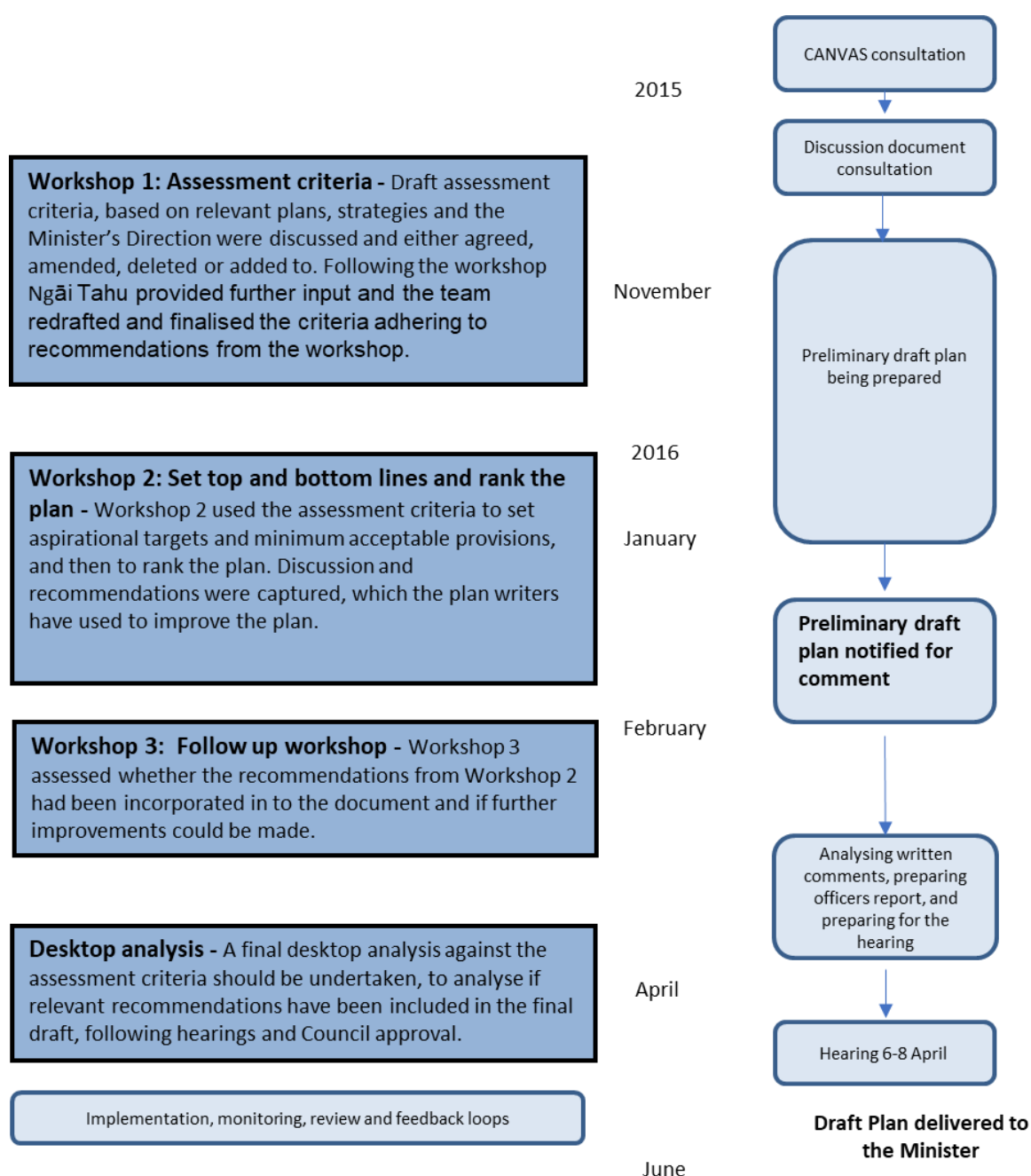
Appendix 4 presents a fourth example, where three stages of integrated assessment were applied to the draft Land Use Recovery Plan: one before consultation; a second while the draft plan was out for consultation; and a third after consultation. The integrated assessment helped with development, checked content and provided recommendations to strengthen and improve the draft plan. An evaluation of the integrated assessment in 2014 concluded the process had an important and valuable influence on the final plan.

#### 2.2 NUMBER OF WORKSHOPS AND INTERVALS BETWEEN WORKSHOPS

The integrated assessment process requires at least two workshop steps. While we have run some workshops on successive days due to timing constraints, it is useful to schedule in a break of several days or preferably weeks. The longer timeframe reduces the pressure on both the assessment team and the participants to act on information overnight. Decisions on the number of workshops is an important scoping step for budget and timing decisions.

If integrated assessment is used within a planning process instead of a test of a draft project or development, then several scoring workshops can also be used on more advanced iterations of the plans. For example, for the draft Ōtākaro/Avon River Corridor Regeneration Plan, workshops were run across increasingly more detailed designs followed by a final workshop on the draft plan. Another example is the draft Land Use Recovery Plan for which three workshops were conducted, along with a final desktop analysis of the plan. At each iteration, the plan was improved. Finally, the integrated assessment of the draft Waimakariri Residential Red Zone Recovery Plan followed a similar path, as Example 4 shows.

#### Example 4. Timeline and approach for the draft Waimakariri Residential Red Zone Recovery Plan integrated assessment



### 2.3 SELECTING WORKSHOP PARTICIPANTS

Decisions about which workshop participants to select are guided by the location and objectives of the proposal, and the resources, instruments and organisations involved in its implementation. As a group, the participants need to have knowledge and wisdom across all the matters that the assessment criteria cover. They need to understand equity issues and the social determinants of health and wellbeing, and 'speak' for future generations. Recruitment should focus on an individual's knowledge and experience rather than on achieving organisation or agency representation. Subject

specialists are a useful addition if the proposal involves novel or technical aspects. Many participants will be employees or members of organisations and they need to be guided to leave their partisanship at the door.

You can make a list of potential invitees from existing professional institutes and peak bodies (for example, planning, architecture, environmental, economic) and recognised experts (extensive experience in the local area, through the environment court, or other), as well as including wider community representation such as local chamber of commerce, residents' association, and ethnic, faith-based or age groups. Take care to avoid valuing professional skills over local knowledge. Depending on the type of plan you are preparing and who its implementation will affect, you may wish to select local community members. For example, when making plans for the residential red zone<sup>1</sup> in Waimakariri, the district council invited individuals that still lived within the red zone, but represented a wider group, to participate. The critical qualities guiding your choice are that participants must be:

- able to represent a wider view
- able to speak on behalf of future generations, the environment or other aspects
- constructive and positive in their approach.

Mana whenua (or local indigenous community) must be involved. It is also important to include others that can contribute to social and cultural assessment criteria, such as European heritage, Pasifika, recent migrants and other hard-to-reach groups that will be able to contribute to the workshop and ultimately the future of the area or resource you are planning for. Document the invitation list, including the reasons for choosing particular individuals. Remember that a bias in the composition of participants will in turn introduce a bias in the content and outcomes of the assessment.

As the range of participants described above demonstrates, integrated assessment has proven a useful tool to engage diverse stakeholders in the planning process. In all case studies in this guide, assessments have engaged community members alongside subject matter experts and officials. New Zealand assessments have always included criteria sourced from mana whenua; more recent assessments have included a separate mana whenua-led assessment programme with its own criteria.

It is worth considering whether to avoid individuals with a narrow focus on protecting their own private property or business. Some loud voices are already well heard (captured through separate consultation processes). Also, some individuals may not be well suited to working collaboratively. Local knowledge will guide you in identifying such individuals. Also helpful to selection is to think about the composition of small groups within the workshops. It is important to understand who is representing community and any mandate.

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<sup>1</sup> A residential red zone was a category of land that the Government created for areas that experienced severe land damage during the Canterbury earthquake sequence of 2010–2012, where the Crown would make an offer to buy the land.

If an established planning or governance group, such as an advisory panel or reference group, is going to use the integrated assessment, then subject specialists must attend the workshops to ensure relevant knowledge and information are included in deliberations and decisions.

A total of 30 to 40 assessment criteria is common. On this basis, the assessment team can anticipate between 40 and 60 participants and a first workshop length of about six hours.

Personal invitations that outline the process and workshop demands are often necessary to gain a commitment from busy or 'in demand' participants. Participants must commit to attending two workshops so you need to set the date of workshop two during this first step and include it in the initial invitation. The usual organisational rules of workshops apply; ensure an age, gender and ethnic balance and invite more than you need to cover for those who pull out at the last minute. The schedule should also allow time for parents to drop children to school or care. Previous assessments have shown that an email invitation may not be enough; a more successful approach is to make a phone call to personally invite potential participants and then another to confirm their involvement. It also provides an opportunity to thank participants in advance.

Before the workshop, it is also important to explain that what participants could be assessing is confidential. This is because integrated assessment is normally carried out prior to the formal community consultation and engagement processes. Participants may need to sign a confidentiality agreement before they begin the first workshop.

Give careful thought to the make-up of the small breakout groups. Place all the 'noisy voices' in one group and the quieter ones in another. Each small group needs to have assigned someone with facilitation skills to ensure everyone has a voice. Identifying participants early helps you to work out the style of venue you need and to plan for catering.

## 2.4 IDENTIFYING RESOURCE NEEDS

The most important resource for an integrated assessment is people with the knowledge and aptitude to oversee the process, led by an experienced impact assessment practitioner/consultant. These people are involved in process design, developing the draft assessment criteria and reporting. The impact assessment practitioner/consultant supports agency staff to develop the draft criteria for use in workshop one, and contributes alongside other stakeholders in workshops one and two. Without staff buy-in and commitment, the assessment cannot proceed. You will need a budget for consultant time unless the team has previous experience with the tool. Resource for staff to help with workshops and take notes is also important. Agreeing a framework or template to record outcomes from the workshop is critical to save time and resources, and to have a record of all relevant information for future use.

The workshops involve a wide range of high-performing people whose time is valuable. The assessment team needs to be well prepared to get the most out of their expertise in a relatively constrained timeframe. Setting clear expectations at the start of the workshops helps achieve clear recommendations for the proposal authors by the end of the workshops. Also use local knowledge, think about seating arrangements and groupings for the workshops and implement local protocols. The workshops need the full support and understanding of all agencies that are part of preparing the

plan or project, including mana whenua. This takes work 'behind the scenes' before the workshops to deliver an effective and well-supported outcome.

Circulating a brief outline of the process ahead of the first workshop and a clear outline of the draft proposal before the second is helpful.

As noted above, a total of 30 to 40 assessment criteria is common, suggesting between 40 and 60 participants will attend the workshops. You will therefore need a large neutral meeting space, ideally situated within or close to the community affected by the proposal. As the first workshop usually takes about six hours, the space needs to be comfortable with a place for coffee breaks and lunch.

Essential are large (A0) sheets presenting the assessment criteria, description and scale steps. These allow workshop participants to easily see and comment on the draft criteria (workshop one) and score the draft proposal (workshop two).

Appendix 5 lists resources needed for workshop one.

### 3. THE ASSESSMENT PROCESS: PREPARING THE DRAFT ASSESSMENT CRITERIA

In the first step of the assessment process, the integrated assessment team produces a long list of criteria headings, as described in Section 2. In this iterative process, they test ideas for relevance and remove redundancy. For each criterion, a clear definition is then developed, plus a set of scale steps for each criterion, from those that comply with the criterion at a low level to those complying at a high level. The starting point needs to be the existing cultural, social, economic and environmental pillars of the relevant area, along with the existing statutory framework and the aims of the draft proposal. This step ensures the draft proposal is being assessed against its own goals and objectives as well as against relevant best practice principles.

This is the most demanding step in the integrated assessment process. To do it well, the professionals involved should have a good understanding of the planning and resource management frameworks, including the cultural, social, economic and environmental plans, policies and programmes in the area. The investment in establishing clear and workable criteria is vital if the assessment workshops are to run smoothly and produce effective results. The assessment team can draw on criteria used in past assessments referenced in this guide.

Each assessment criterion needs a short statement describing what that criterion means for the proposal being assessed. A useful guide to writing such a description is to phrase it as an objective and to ensure that the draft proposal (policy, plan, project) can actually achieve whatever you are describing, as the Examples 5 and 6 demonstrate. Pay attention to the active verb in the scoring criteria, and be consistent throughout all assessment criteria in your use of words that have legal implications, such as *may*, *must*, *shall*, *maintain*, *preserve*, *enhance* and *improve*.

The next decision is the scale. A typical distribution is either from:

- –1 to +3, which works well where policy makers or planners are using integrated assessment to check alignment with a set of objectives, or
- –2 to +2, which is more useful for comparing two alternatives or a larger number of options, because it allows for a more diverse range of testing points.

The final step is to write the criterion scale step descriptions. Examples 5 and 6 have clear statements, more or less ‘even’ intervals between the different steps and a neutral step position set as little or no change. The wording of the steps describes phased progress away from the objective in the negative direction, and towards achieving the objective in the positive direction. Great discipline is needed to write the descriptors for each scale step so that they contain only one variable.

The process for writing the descriptor and scale steps is iterative and revisions are often required. As scale steps are developed and amended, it is often necessary to alter the description, and vice versa.

**Example 5. Criteria and scale steps from the draft Canterbury Water Management Strategy assessment (an options comparison)**

Criterion			Description	Strong negative impact	Moderate negative impact	Neutral impact	Moderate positive impact	Strong positive impact
				–2	–1	0	+1	+2
Environmental	13	Water quality for recreation	Water quality for contact recreation (regional plan objectives and standards)	Standards regularly breached in many locations	Standards frequently breached in some locations	Water quality maintained at current levels	Standards breached occasionally in some locations	Standards rarely breached

**Example 6. Criteria and scale steps from the draft Ōtākaro/Avon River Corridor Regeneration Plan assessment (assessment against planning objectives)**

Criterion	Description	Small negative impact	Neutral impact	Small positive impact	Moderate positive impact	Strong positive impact
		–1	0	+1	+2	+3
Aquatic habitat and ecosystems	Aquatic and riparian species and habitat are representative and self-sustaining	Inappropriate restoration leads to negative outcomes for local ecosystems	Local habitat is discounted in decisions	Limited effort is made to re-establish representative native species and habitat	Some areas are nominated for re-establishing local and aquatic riparian species and habitat	Full opportunity is incorporated to rejuvenate a diversity of aquatic and riparian species and habitat

Example 7 illustrates how using multiple variables can be a problem. The multiple variables added into the +3 position illustrate how having the three ‘requirements’ in the scale step of the *strong positive impact* position makes it difficult to score even though the proposal might have exceeded all the *moderate positive impact* criteria.

**Example 7. Criteria and scale steps from the draft Christchurch Central City Plan assessment (assessment against planning principles)**

Guiding principle	Criterion	Description	Small negative impact	Neutral impact	Small positive impact	Moderate positive impact	Strong positive impact
			–1	0	+1	+2	+3
Support business through high quality and innovative infrastructure	31 Renewable energy	Use of renewable energy generated from across the city with additional generation and distribution	The plan presents barriers to the development and distribution of renewable energy across the city	The plan makes no mention of local renewable energy generation and distribution	The plan proposes renewable energy is generated across the wider city and distributed within the Four Avenues	The plan provides incentives for renewable energy is generated across the wider city and distributed across the wider city and within the Four Avenues	The plan encourages renewable energy is generated across the wider city and distributed across the wider city and within the Four Avenues via a range of advocacy, leadership, incentives and regulation

The completed draft criteria and steps are the focus of the first participant workshop, to test for completeness and accuracy, and set the top and bottom line positions.

## 4. THE ASSESSMENT PROCESS: WORKSHOPS

This section covers steps 3 to 5 of the integrated assessment process: the first two workshops and a further optional workshop. Guided by the process leader, the assessment participants learn about the process and then work in small groups with a facilitator and note-taker to either review (workshop one) or apply (workshop two) the assessment criteria.

### 4.1 WORKSHOP ONE

The first workshop has three purposes:

1. to introduce the process and role of the participants
2. for participants to 'take ownership' of the assessment criteria by reviewing the drafts for completeness and clarity
3. to assign top and bottom line positions on the scale steps of all criteria.

Importantly, participants complete all this work without reference to the draft proposal, which will later be the subject of the assessment.

The workshops are usually held before the formal public consultation process, so participants need to observe confidentiality. The timing also makes it possible to use the first two workshops to test various ideas, thus improving the quality of the proposal and improving engagement, before wider consultation. Basing the workshops on the 'Chatham House rule'<sup>2</sup> encourages open and frank discussion among participants. Also advise participants of the confidentiality requirements when sending them their invitations.

The central objective in designing the workshops is to achieve a programme that allows participants adequate time to understand the criteria and amend them in workshop one and then to apply them in subsequent workshops. Given a workshop typically involves 30 to 40 criteria and at least as many participants, you need to divide up the work. Having four small pre-assigned groups works well; for example, you can divide criteria and participants into aligned social, cultural, economic and environmental pillars.

Because many participants have wide interests, skills and experience, participants may wish to contribute to more than one group. The example agenda in Appendix 6 gives time for participants to circulate, view other groups' work and make comments to report back to the group when they reassemble.

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#### 4.1.1 AMENDING AND ADOPTING THE DRAFT ASSESSMENT CRITERIA

The integrated assessment professional makes a short presentation at the beginning of workshop one to introduce the integrated assessment process, the role of participants and the role of the support team. The participants then convene in their pre-assigned small groups to review all the

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<sup>2</sup> When a meeting, or part of it, is held under the Chatham House rule, participants are free to use the information received, but the identity and affiliation of the speaker(s) and any other participant(s) cannot be revealed.

draft assessment criteria for completeness as a set (with reference to the assessment frame) and the appropriateness of the wording and the scale step descriptions and position.

Changes that participants may make include merging or separating out criteria, creating new criteria, amending the wording, and/or adjusting the scale steps to start lower or finish higher.

This detailed work is necessary so that participants can use both criteria and scale steps confidently in the assessment stage (workshop two).

#### 4.1.2 SETTING THE TOP AND BOTTOM LINES

Top and bottom line positions across the scale steps are required for all criteria. The bottom line position is an agreed safe minimal (e.g., for resource use) or minimum achievement level (e.g., for a service). The top line position is an aspirational or desirable upper limit to strive for. The workshop participants discuss and agree a position on the scale steps that the final proposal should meet as a minimum – the bottom line. And similarly, a top line position is agreed. These are shown as a circle (bottom) and square (top) in the diagrams below. The discussion is supported by technical reports and higher-level planning documents, and importantly, professionals who are very familiar with their content.

The top and bottom line positions are usually on different scale steps. Variations are possible, however: they may be on the same scale step and may also be set between scale steps or across more than one, especially if group members differ in their opinions.

In Example 8, the assessment criterion, from the integrated assessment of the draft Land Use Recovery Plan, shows the top line (red box) and bottom line (red circle) positions that participants agreed on.

#### Example 8. Criterion from the draft Land Use Recovery Plan assessment with agreed top and bottom line positions

17 Criterion	Description	Small negative impact	Neutral impact	Small positive impact	Moderate positive impact	Strong positive impact
		–1	0	+1	+2	+3
Redevelopment of existing development areas in a more concentrated form	Redevelopment of existing urban areas in a more concentrated form including business activities	The plan does not support medium and high-density developments	The plan does not encourage medium and high-density developments	The plan promotes innovative urban development in existing areas	The plan enables density developments and promotes innovative urban development in all new and existing areas	The plan ensures higher quality mixed use development – including high and medium density developments and incentivises innovative development in existing areas

Key: Red box = top line; red circle = bottom line.

#### 4.1.3 KEY ISSUES FOR WORKSHOP ONE

Experience has shown the following are key issues to manage:

- Use clear and active language in the draft assessment criteria.
- Edit the draft criteria well so participants don't get stuck on wordsmithing.
- Able and experienced facilitators are essential for each small group.
- Ideally have a person in each small group who can answer questions about the overall process.
- When groups are circulating, it is very important for the note-taker (at least) to remain with the marked-up criteria sheets to explain any changes to members of other groups.
- Information experts are essential to guide decisions on top and bottom line positions that may be influenced by existing strategies, plans and planning studies or high-level development strategies.

Note: The workshop participants start their work slowly, using time inefficiently, but speed up as they become more familiar with the process.

Using electronic or hand-written notes and large A0 sheets ensures any re-drafted criteria make sense when considered together and are usable in workshop two.

## 4.2 WORKSHOP TWO: THE ASSESSMENT WORKSHOP

In workshop two, the draft proposal is introduced for the participants to assess using each of the criteria. They do this in the same small groups that they worked in for workshop one. If the planning process does not easily provide for circulation of the draft proposal before workshop two, the workshop must allow suitable time and means for the participants to get a good understanding of the draft proposal before they begin scoring.

It is essential that one individual with a comprehensive knowledge of the draft proposal participates in each small group to ensure the groups make decisions based on a full and correct understanding of what is proposed. This also ensures the proposal authors hear the rationale for the score, assisting them if and when they need to make changes to the draft proposal.

Participants decide on scores via discussion and through consensus in their small groups. By this stage in the assessment, the participants have accumulated a good understanding of the draft proposal, criteria and scale steps. Therefore, it is often straightforward for them to score where the draft proposal sits on the scale via direct reference back to the draft proposal itself. In Example 9, which presents two completed scores from the draft Land Use Recovery Plan, a cross shows the group's decision.

### Example 9. Completed scores for two criteria from the draft Land Use Recovery Plan

16 Criterion	Description	Small negative impact	Neutral impact	Small positive impact	Moderate positive impact	Strong positive impact
		-1	0	+1	+2	+3
Land and space are available for a range of businesses	Sufficient land and space is available for business development	<del>The plan provisions restrict land availability for business to meet demand</del>	The plan does not increase the supply of land for business developments to meet demand	The plan promotes land business development	The plan enables land for business development in all locations where business activity is compatible with infrastructure availability, labour and markets	The plan ensures sufficient land for business development and is receptive to the need for additional land that is compatible with infrastructure availability, labour and markets

17 Criterion	Description	Small negative impact	Neutral impact	Small positive impact	Moderate positive impact	Strong positive impact
		-1	0	+1	+2	+3
Redevelopment of existing development areas in a more concentrated form	Redevelopment of existing urban areas in a more concentrated form including business activities	The plan does not support medium and high density developments	The plan does not encourage medium and high density developments	The plan promotes innovative urban development in existing areas	<del>The plan enables density developments and promotes innovative urban development in all new and existing areas</del>	The plan ensures higher quality mixed use development – including high and medium density developments and incentivises innovative development in existing areas.

Key: Red box = top line; red circle = bottom line; cross = group's decision.

Sometimes at this stage participants cannot score one or more criteria because they require more certainty than the draft proposal provides, usually about implementation. This is also a useful outcome as it highlights where additional information in the plan is required.

The discussion that leads to these decisions is usually rich in information to assist planners and policy-makers. For this reason, comprehensive note-taking is worthwhile. While participants do the bulk of the discussion during the workshop, the assessment team and integrated assessment professional often need to refine the recommendations before reporting back to the proposal authors.

Microsoft Word tables offer a simple format for reporting. Use the embedded drawing tool to create circles, crosses and squares.

#### 4.2.1 KEY ISSUES FOR WORKSHOP TWO

Experience has shown the following are key issues to manage:

- Present the draft proposal clearly and succinctly. This is often one of the most difficult tasks in the workshop.

- Include one of the planners or proponents of the draft proposal (or at least someone with good knowledge of it) in each small group.
- A dedicated note-taker helps in giving effective feedback to the planners and proponents.
- Before the workshop, prepare the team that will be running it. This ensures that messages from the facilitator and/or plan presenter are clear, and that resources are dedicated to note-taking in a pre-agreed format that is most useable to the proposal authors and that involves an efficient approach.

#### 4.3 THE ROLE OF ADDITIONAL WORKSHOPS

In three of the case studies of using the integrated assessment tool, the commissioning organisation requested additional workshops to further test the draft proposal through its development by planners and designers. These were the:

1. draft Land Use Recovery Plan
2. draft Waimakariri Residential Red Zone Recovery Plan
3. draft Ōtākaro/Avon River Corridor Regeneration Plan.

Adding another workshop enabled proposals to be altered to bring them closer to, or above, the top line position in the criteria scale steps – that is, closer to the original goals and objectives of the proposal. In each case, the additional workshop:

- provided planners with an opportunity to introduce and test novel or innovative measures
- made it possible to establish a more robust evidence base for decision making, and transparent scoping and testing of options, particularly where there were anticipated court challenges to the plan (which did eventuate and were successfully defended)
- could follow a swifter process, while at the same time being an opportunity to provide a long-term sustainable outcome for the community
- helped planners to re-draft the proposals, reflecting the contribution from ‘wise heads’ with extensive experience and expertise across a wide range of disciplines and positions of community leadership
- allowed for broader discussion as workshop participants became more familiar with the process while also building relationships.

## 5. WRITE UP AND REPORT

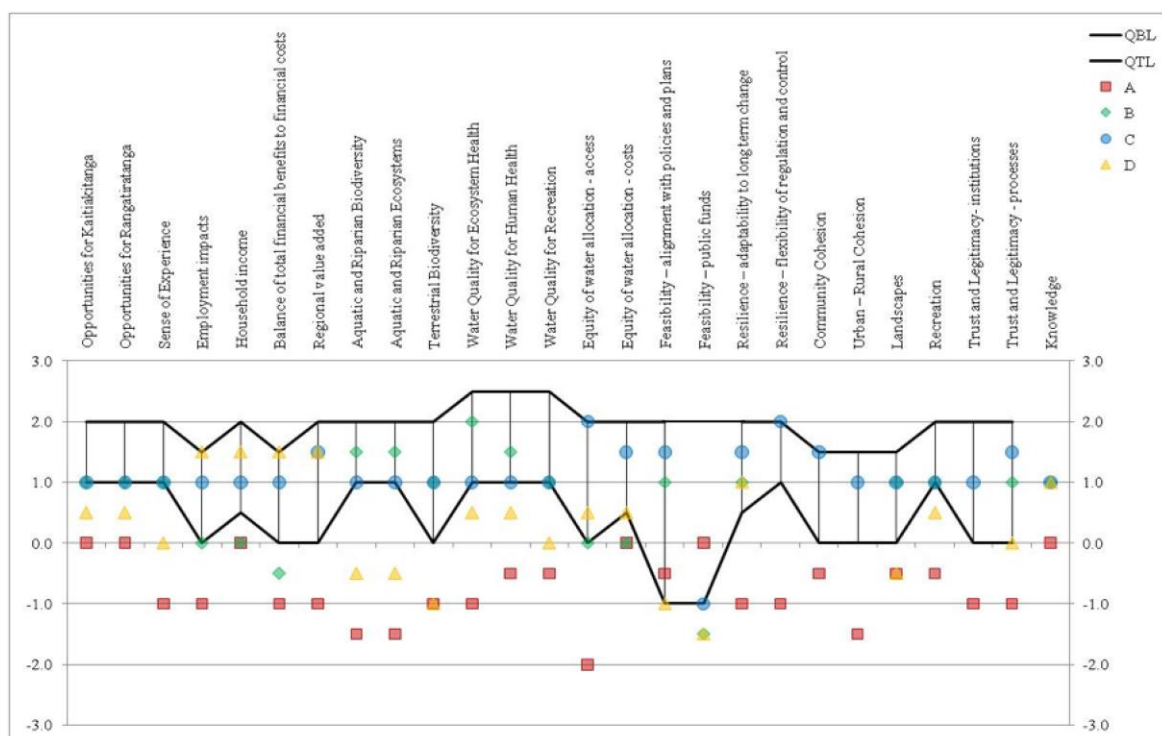
When compiled, the assessed and scored criteria provide an overall picture of how the draft proposal ‘measures up’. Individual scores and commentary that the note-takers document provide guidance for the proposal authors about what needs further work and how to improve.

Note-taking and giving clear recommendations to proposal authors comprise a critical step in the process. Capturing the essence of the conversation in each small group and providing that to proposal authors or those in charge of developing strategies needs resource and careful consideration. For many of the workshops, note-takers were working on laptops at each table, filling out the ‘scorecard’ as the workshop moved through the process. Note-takers also recorded actions and recommendations that required following up. Such notes provide clear direction to proposal authors, as well as a reliable record of the workshop to use during subsequent re-drafting and/or in conversations with decision makers.

In some cases, an interim report was provided immediately after the workshops, followed up with a more thorough report later. For many of the processes, time was of the essence and reporters were typing notes at the workshop tables, capturing the conversation and outcomes, so that recommendations could be sent to proposal authors the following day.

Example 10 presents the results of the assessment of the four draft Canterbury Water Management Strategy options. Across the top are the criteria and beneath each criterion are four scoring marks, one for each option. The black lines are the top and bottom line position for each criterion. Option C (blue dots) scored considerably better than any of the other options and indeed this was the option that decision makers chose to proceed with. Such graphics greatly assist proposal authors and decision makers.

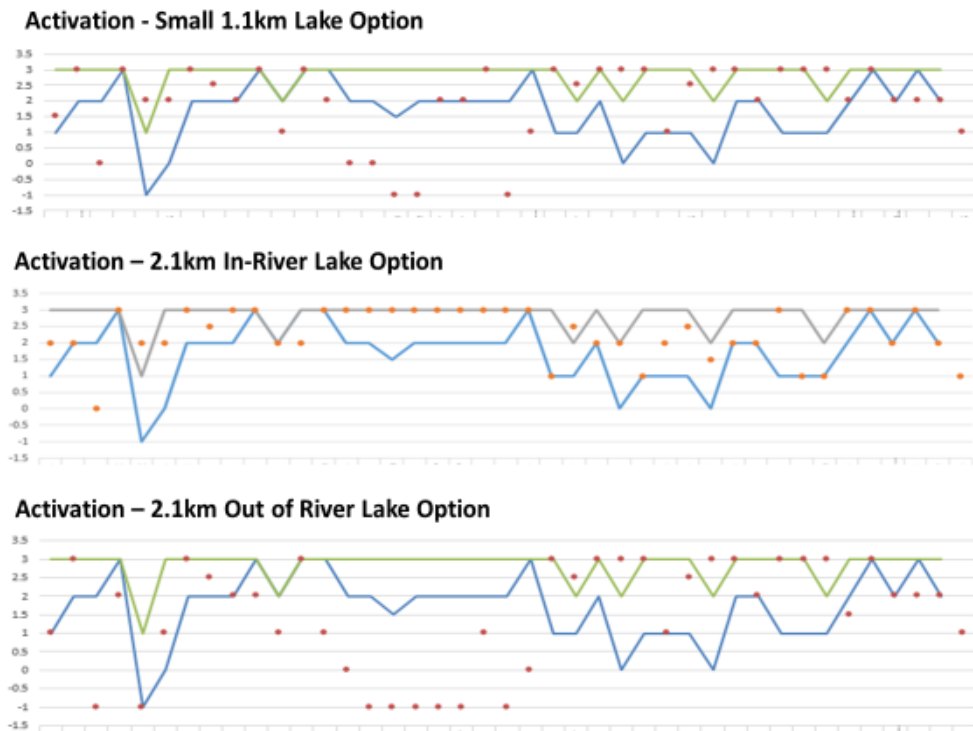
## Example 10. Results of impact assessment of the draft Canterbury Water Management Strategy



Three further reporting examples are presented below.

Example 11 graphically reports the assessment of preliminary designs for the lake options in the developing Ōtākaro/Avon River Corridor Regeneration Plan. Each coloured dot represents a score for a criterion. The top line is in green and the bottom line in blue. For the ecological criteria, the In-river Option scored consistently higher (scoring at the top line) compared with the Out-of-River-Option (scoring below the bottom line). This provided a clear message of where the In-river option was on course to meet the objectives set for it and where, if decision makers wanted to proceed with that option, there was more work to do. The format shown in Example 11 was created in Microsoft Excel.

### Example 11. Assessment results comparing lake options in the draft Ōtākaro/Avon River Corridor Regeneration Plan



Other assessments used non-graphical reporting formats. Example 12 shows the table format used to report the results of the second workshop to assess the draft Land Use Recovery Plan. A summary of the workshop assessor's comments appear in the second column followed by more detailed commentary in the third column and, in the final column, suggested actions to address the recorded shortcomings.

### Example 12. Scoring and notes for the Land Use Recovery Plan author

Assessment criterion	Planners response	Commentary	Comments
Greater Christchurch has integrated transport networks	<p>We understand the plan has the intention to address the integration – that is good – currently not there therefore have scored low.</p> <p>Added an additional criterion – integration of transport that integrates with economic uses</p>	<p>Development should be supported by transit and active transport – cross referring policies would be useful. The transport sections is very siloed</p> <p>No timeframe given for achieving goals</p> <p>Incoherent disconnected transport and transport safety with no push towards connectivity – there is a concentration on building new</p> <p>Not enough grunt in the LURP and is certainly not specific enough</p> <p>The plan does not point toward coordination</p> <p>All new development should be transport orientated.</p>	<ul style="list-style-type: none"> <li>• A significant question for the LURP is how to integrate social and community sustainability into transport and land use. Ensure direction given to integrate these.</li> <li>• Synchronise land use with provision of connections with facilitating community development.</li> <li>• Make specific links within the Transport chapter. Cross reference other relevant parts of the plan – transport</li> </ul>

The final example of reporting is the integrated assessment for the draft Land Use Recovery Plan. The report started with an early draft iteration shared with workshop participants to test early thinking and guide this important strategic document. They had many fundamental questions to answer about a wide range of topics that focused on governance, implementation and being clearer about community outcomes, not just providing land for building houses and infrastructure. Example 13 illustrates how the plan evolved over time with a summarised long list of recommendations after workshop one, and a decreasing list of matters that needed to be addressed in the plan through subsequent assessments.

## Example 13. Recommendations from the three stages of the draft Land Use Recovery Plan integrated assessment

Part One	Part Two	Part Three
<b>TRANSPORT</b> <ul style="list-style-type: none"> <li>Include public and active transport plans for all developments and centres</li> <li>Ensure employment centres are accessible via a full mix of transport modes</li> <li>Ensure land use patterns are integrated with transport infrastructure</li> <li>Protect key corridors for future public transport</li> </ul> <b>IMPLEMENTATION</b> <ul style="list-style-type: none"> <li>Consultation using broad community involvement</li> <li>Community, partners and stakeholders involved in monitoring/implementation</li> <li>Use SMART indicators</li> <li>Invest clear objectives that drive actions</li> <li>Leadership – clear decision making lines</li> <li>Consider agency or group targeted to facilitate change</li> <li>Delegate decision-making to appropriate scale</li> </ul> <b>HAZARDS AND ENVIRONMENT</b> <ul style="list-style-type: none"> <li>Explicit links to RPS on avoidance of natural hazards including planned retreat</li> <li>Acknowledge climate change and flooding</li> <li>Create green services – green roofs, walls, stormwater, buildings, natural corridors</li> <li>Integrate with the Natural Environment Recovery Programme (NERP)</li> <li>Provide context of the natural environment and reference existing strategies</li> <li>Explicitly protect aquifer recharge area</li> <li>Explicit links with CHMS Implementation Programmes</li> <li>Protect groundwater for drinking water refer to drinking water standards</li> <li>Acknowledge the potential for land use to affect water quality</li> <li>Minimise impacts on the environment to strengthen whakapapa</li> <li>Maintaining and securing productive land</li> <li>Ngāi Tahu involved at the top level for natural resources</li> </ul> <b>REBUILDING AND BUILDING COMMUNITIES</b> <ul style="list-style-type: none"> <li>Enable development in existing communities and how red zone community relocated</li> <li>Identify of accessibility a focus here for existing and new communities</li> <li>Strong centres-based policies to plan – local and key activity centres</li> <li>Local retail included in new subdivisions</li> <li>Strengthen the use of suburb master plans</li> <li>Incentivise and encourage mixed-use developments</li> <li>Health and social services in new developments</li> <li>Direct agencies to ensure social services provided in all communities</li> <li>Encourage the mix of middle use in retail areas to encourage interaction with the street</li> <li>Synchronise land use with community development</li> <li>Provide people with quality connections to the built environment where can express their interests</li> <li>Create a sense of belonging and identity and provide for community diversity</li> <li>Provide spaces for communities to gather</li> <li>Use surplus Crown land for social services including educational</li> </ul> <b>LOCATION AND QUALITY OF DEVELOPMENT AND BUILDINGS</b> <ul style="list-style-type: none"> <li>Target the quality design of buildings and standards and a systems approach to urban design</li> <li>Develop incentives necessary to improve more concentrated redevelopment of existing areas</li> <li>Integrate and design of the public space</li> <li>Health and wellbeing aspects to design should be central to building design and performance</li> <li>Integrate existing with new land-use and be clear about how to achieve this</li> <li>Guidelines and incentives are put in place to encourage high energy rating rebuilding</li> <li>Dedicated development agency with a focus on brownfield development</li> <li>Provide a business tier to champion business needs</li> <li>Remove resource consent compliance costs for red zone businesses</li> <li>Brownfields development more explicitly supported through range of non-regulatory mechanisms</li> <li>Use existing infrastructure over building new</li> <li>Land availability lined up with market needs – staging and sequencing</li> <li>High level zoning for business – industrial (all), office (all) and other</li> <li>Name all Māori reserves</li> <li>Draw on and use local people and products</li> <li>Review criteria for a floating zone and use if it can be extended to other areas and types</li> </ul> <b>HOUSING</b> <ul style="list-style-type: none"> <li>Maximise the range of housing types and for elderly</li> <li>Subdivision covenants allow for a range of house sizes and types</li> <li>Partner to deliver social housing and residential care services</li> <li>Warrant of fitness scheme for rental housing</li> <li>Prepare affordable housing policies for new developments</li> <li>Housing meets current short term to be reused in the future</li> <li>Reuse building houses for workers eg affordable housing</li> </ul>	<b>TRANSPORT</b> <ul style="list-style-type: none"> <li>Specific requirements for active transport</li> <li>Refer to all transport documents / strategies</li> </ul> <b>IMPLEMENTATION</b> <ul style="list-style-type: none"> <li>Increase emphasis on collaboration and community participation in implementation</li> <li>Strengthen way to work with industry and developers</li> <li>Firm commitment for active community involvement</li> <li>Take a long-term sustainable view to manage growth – Whakatauki</li> <li>Strengthen information on monitoring and reporting progress</li> <li>Leadership for implementation</li> <li>Institutional change monitoring and data sharing</li> <li>Ensure cultural and Māori concepts are included in the Plan and engage fully with Ngāi Tahu as a partner</li> </ul> <b>HAZARDS AND ENVIRONMENT</b> <ul style="list-style-type: none"> <li>Outline plan for flood management</li> <li>Natural green spaces and cover and access to green spaces and cover</li> <li>Maximise sustainable opportunities</li> <li>Improved and enhanced natural ecosystem health and biodiversity</li> <li>Advanced surface water management, including water harvesting and stormwater management</li> <li>Protect waterways for a variety of values</li> <li>Protection of quality and quantity of groundwater</li> </ul> <b>REBUILDING AND BUILDING COMMUNITIES</b> <ul style="list-style-type: none"> <li>Build communities and the concept of villages is visible</li> <li>Ensure health and social services</li> <li>are equitably located</li> <li>Social services are placed in new subdivision or centre developments</li> <li>Clarify the role and function and scale of centres</li> </ul> <b>LOCATION AND QUALITY OF DEVELOPMENT AND BUILDINGS</b> <ul style="list-style-type: none"> <li>Focus on vulnerable populations</li> <li>Development and financial contributions reviewed to how best utilised</li> <li>Specifics on OTC expiry – clarify responses to transitional processes for change</li> <li>Infrastructure is a community asset – ensure it is built to a high standard</li> <li>Lifelong Port and town recovery issues added</li> <li>Toolbox for sustainable housing</li> <li>Evaluate the housing portfolio</li> <li>Insurance impediments to redevelopment especially multiple ownership</li> <li>Protect rural production land and manage rural residential</li> </ul> <b>HOUSING</b> <ul style="list-style-type: none"> <li>Quality and repair of existing and new housing</li> <li>Warrant of fitness scheme for rental housing</li> <li>Include toolbox for sustainable housing</li> <li>Ensure transitional housing available locally for people awaiting a rebuild</li> <li>Minimum standards for temporary homes as may become more permanent housing stock</li> </ul>	<b>TRANSPORT</b> <ul style="list-style-type: none"> <li>Integrate active and public transport into new development and local retail centres</li> </ul> <b>IMPLEMENTATION</b> <ul style="list-style-type: none"> <li>Ensure community participation in monitoring and review of implementation</li> <li>Ensure wide range of community representation on the Strategic Implementation Forum</li> <li>Land use change part of annual monitoring and reporting</li> </ul> <b>HAZARDS AND ENVIRONMENT</b> <ul style="list-style-type: none"> <li>Address the implications of hazard and managed retreat from identified areas – this is not included and no explanation has been provided</li> <li>Ensure natural green spaces and cover (green roofs, stormwater, buildings, natural corridors)</li> </ul> <b>REBUILDING AND BUILDING COMMUNITIES</b> <ul style="list-style-type: none"> <li>Focus on building communities and urban villages – difficult but not included in actions</li> </ul> <b>LOCATION AND QUALITY OF DEVELOPMENT AND BUILDINGS</b> <ul style="list-style-type: none"> <li>Consider more mechanisms/ tools for intensification rather than regulatory mechanisms</li> <li>Clearly direct staging and sequencing of Green-field land</li> <li>Review tenure issues to support intensification and multiple ownership</li> </ul> <b>HOUSING</b> <ul style="list-style-type: none"> <li>Transitional housing is not well developed</li> <li>Outline ways to integrate greater housing density into inner urban areas that are semi occupied or of poor quality to use existing infrastructure</li> <li>Ensure quality and repair of existing and new housing</li> </ul>
<b>Description of table:</b> <p>Table 1 shows the list of recommendations for improvements to the Plan at each stage- Parts One, Two and Three.</p> <p>Part One resulted in a long list of suggestions for improvements to the early draft of the Plan. The number of recommendations reduced significantly by Part Two (Preliminary Draft) and even further by Part Three.</p> <p>While Table 1 does not show the extent to which each recommendation was incorporated into the Plan (for example some assessment participants may prefer the Plan to go further still, and some recommendations were not taken up but the reasons why were visible in the Plan), it does show that to a large extent, the draft Land Use Recovery Plan has addressed the concerns identified through the integrated assessment process.</p>		

## 6. EVALUATION

The use of integrated assessment has been independently evaluated on three assessments completed as part of recovery planning from the Canterbury earthquake sequence of 2010–2012. These evaluations empirically confirmed the value of this tool, to both budget holders and project managers, in improving the performance of the plans. It was also evident that the evaluations had given little attention to why the planning organisation chose to perform an integrated assessment, or how much weight decision makers gave to the findings from the integrated assessments compared with other sources of information.

What is clear, however, is that the integrated assessment provided valuable content for draft plans, captured some issues that may have otherwise not been articulated in the plan and helped with implementation by contributing a sense of ownership for participants. At the same time, the workshop process contributed to community engagement and/or consultation.

The evaluations have produced consistent findings demonstrating that:

- workshop participants value and support the use of the integrated assessment process
- the final version of the draft proposal in each case adopted most integrated assessment recommendations.

The evaluations were:

- Green, J. and Walsh, M. (2014). Integrated Assessment in Recovery. An evaluation of the Integrated Assessment of the Land Use Recovery Plan. Christchurch, Community and Public Health.
- Community and Public Health Information Team (2015). Evaluation of Wellbeing Impact Assessment of the Port Lyttelton Recovery Plan Project. Christchurch, Community and Public Health.
- Community and Public Health Information Team (2017). Supporting local government through integrated assessment: An evaluation of Community and Public Health's contribution to the integrated assessment of the Waimakariri Residential Red Zone Recovery Plan.

## GLOSSARY

Ahi kā – to keep the fires burning, maintaining occupation

Iwi – tribe

Karakia – prayer

Kawa – ceremony

Mana – authority, status

Mana whenua – authority over land, people of the land

Manaakitanga - hospitality

Mauri – life force

Mihi – greet, acknowledge

Ngāi Tahu – tribal group occupying much of the South Island

Ōtākaro – Avon River

Rangatiratanga – chieftainship

Residential red zone – a category of land that the Government created for areas that experienced severe land damage during the Canterbury earthquake sequence of 2010–2012, where the Crown would make an offer to buy the land

Rūnanga – tribal council, assembly

Tangata whenua – the indigenous people

Te Ngāi Tūāhuriri Rūnanga – a hapū of Ngāi Tahu, based at Tuahiwi

Te reo – the language, voice

Tikanga – traditions, customs

Whakapapa – genealogy

Whanaungatanga – relationships

Whenua – land

## BIBLIOGRAPHY

Community and Public Health (2014). Evaluation of the Wellbeing Assessment of the Draft Lyttelton Port Recovery Plan. <https://www.cph.co.nz/wp-content/uploads/EvaluationWellbeingLAlytteltonPort.pdf>

Community and Public Health (2015). Integrated Assessment of the Draft Waimakariri Residential Red Zone Recovery Plan, Canterbury. [http://www.redzoneplan.nz/data/assets/pdf\\_file/0024/16287/WDC-Integrated-Assessment-Report-March-2016-RRZRP.pdf](http://www.redzoneplan.nz/data/assets/pdf_file/0024/16287/WDC-Integrated-Assessment-Report-March-2016-RRZRP.pdf)

Community and Public Health Information Team (2015). Evaluation of Wellbeing Impact Assessment of the Port Lyttelton Recovery Plan Project. Christchurch, Community and Public Health.

Environment Canterbury (2013). Report R13/18, Integrated Assessment of the Draft Land Use Recovery Plan. <https://ceraarchive.dpmc.govt.nz/sites/default/files/Documents/integrated-assessment-for-the-draft-lurp-june-2013.pdf>

Green, J. (2013). Evaluation of the Health Impact Assessment of the Canterbury Regional Land Transport Strategy. Christchurch, Community and Public Health.

Green, J. (2013). Evaluation of the Health Impact Assessment of the Christchurch Transport Strategic Plan. Christchurch, Community and Public Health.

Green, J. and Walsh, M. (2014). Integrated Assessment in Recovery. An evaluation of the Integrated Assessment of the Land Use Recovery Plan. Christchurch, Community and Public Health.

Jenkins, B., Russell, S., Sadler, B. and Ward, M (2009). *Sustainability Appraisal of Water Management Strategies for Canterbury*. <https://www.researchgate.net/publication/265001293>

Quigley, R. (2011). Wellbeing Assessment of the Castle Plaza Development Plan Amendment Report for City of Marion Department of Health, Quigley and Watts Ltd. <http://siteassets.pagecloud.com/quigleyandwatts/downloads/castle-plaza.pdf>

Quigley, R. and Ward, M. (2011). Integrated Wellbeing and Sustainability Assessment of the Draft Central City Plan. Christchurch. Quigley and Watts Ltd and Martin Ward. <https://www.cph.co.nz/wp-content/uploads/wellbeingsustainabilitydraftcentralcityplan.pdf>

Regenerate Christchurch (2018). Integrated Assessment of the Ōtākaro/Avon River Corridor. <https://engage.regeneratechristchurch.nz/41331/documents/93785>

Russell, S. and Ward, M. (2010). Sustainability Appraisal Application to Canterbury Water Management Strategy. Landcare Research Contract Report LC0910/052, prepared for Canterbury Water Management Strategy Steering Group. [https://www.landcareresearch.co.nz/publications/researchpubs/Russell\\_Ward\\_25April2010.pdf](https://www.landcareresearch.co.nz/publications/researchpubs/Russell_Ward_25April2010.pdf)

Sadler, B., Ward, M. and Frame, R. (2008). A Framework for Sustainability Appraisal in New Zealand, Landcare Research Contract Report: LC 0708/090, Lincoln. <https://www.landcareresearch.co.nz/publications/researchpubs/Framework-for-Sustainability-Appraisal>

## APPENDIX 1: THE CHRISTCHURCH CENTRAL CITY PLAN – FIVE PRINCIPLES AND CRITERIA GROUPINGS

Following the destructive and deadly Canterbury earthquake sequence of 2010–2012, which saw more than half of the central city buildings demolished, the New Zealand Government gave the Christchurch City Council a limited mandate to quickly prepare a draft plan for a future city centre. The Council agreed that the following five principles, which city councillors defined as vital to creating a vibrant and prosperous city, would guide the planning process.

### 1. A long-term view of the future

- Built-in safety and resilience to withstand natural disasters and climate change
- Promote a green and sustainable garden city
- Support a complementary balance between the central city and suburban centres

### 2. Easy to get around

- Promote a city that is easy and safe to get around
- Support a balance between walking, cycling, public transport and driving

### 3. Vibrant central city living

- Create an attractive and vibrant central city to attract people to live in Christchurch
- Encourage a healthy mix of housing, schools, entertainment, offices and shops in the central city
- Ensure that public spaces and buildings are people friendly and liveable

### 4. Foster business development

- Rebuild an economically viable and affordable city
- Attract new business and talent
- Support business through high quality and innovative infrastructure

### 5. Respect for the past

- Enhance the beautiful setting of Christchurch beside the Avon River and Hagley Park at the foot of the Port Hills
- Celebrate the city's culture and heritage for the future
- Respect the existing street pattern

The Christchurch City Council and the Canterbury District Health Board commissioned and jointly funded an integrated assessment. The purpose was to test (assess) the draft plan's compliance or alignment with the planning objectives, in this case their guiding principles. Example 14 lists the criteria that the assessment team (including representatives of the commissioning agencies) developed and shows which of the four pillars the team assigned each criterion to (for operational convenience).

**Example 14. Overview of assessment criteria for the draft Christchurch Central City Plan**

<p><b>Social</b></p> <ul style="list-style-type: none"> <li>• Community involvement</li> <li>• Affordable housing</li> <li>• Safety and resilient buildings</li> <li>• Crime and injury prevention</li> <li>• Equity – demographic diversity</li> <li>• Accessibility and way finding</li> <li>• Community facilities and services</li> <li>• Balance between centre and city</li> </ul>	<p><b>Economic</b></p> <ul style="list-style-type: none"> <li>• Employment</li> <li>• Retail and office space and mix</li> <li>• Precincts</li> <li>• Business hubs</li> <li>• Transport</li> <li>• Education, research, training</li> <li>• Communication technologies</li> <li>• Neighbourhood centres</li> <li>• Food security and availability</li> </ul>
<p><b>Cultural</b></p> <ul style="list-style-type: none"> <li>• Maori values</li> <li>• Sense of place</li> <li>• Heritage</li> <li>• Remembrance</li> <li>• Historic Street pattern</li> <li>• Diversity and vibrancy</li> </ul>	<p><b>Environmental</b></p> <ul style="list-style-type: none"> <li>• Green spaces</li> <li>• Green buildings</li> <li>• Stormwater management</li> <li>• Renewable energy</li> <li>• Multi-use public spaces</li> <li>• Celebrating the Avon River</li> <li>• Urban design and aesthetics</li> </ul>

## APPENDIX 2: CASTLE PLAZA DEVELOPMENT PLAN AMENDMENT WELLBEING ASSESSMENT

### Healthy Transit Oriented Development Principles

#### 1. Sustainable and vibrant Adelaide

- Mixed-use development that incorporates the integration of medium-high density housing and retail/commercial premises.

#### 2. Accessible public transport

- Facilitating the use of a high-quality public transport that is supported by a walking/cycling network.

#### 3. Social inclusion – supporting an inclusive and diverse community

- Access to housing choice and affordability in which design is not compromised
- Flexible building design that can cater for a changing demographic profile over time, such as housing for the aged to housing for families.

#### 4. Physical activity – encouraging a more active lifestyle

- Provision of minimal car parking in residential/mixed-use areas to support the use of sustainable forms of transport
- Open spaces that are high quality recreation spaces for residents, workers and visitors located within walking distance of residences and workplaces, are linked with the open space and greenway network, and offer a diversity of experiences for people of all ages and cultures
- An emphasis on pedestrian entry points to support walkability.

#### 5. Living in a healthy environment – optimising noise and air quality

- Improving air quality and minimising noise impacts via landscaping buffers, roof gardens, 'green' walls, and sensitive site placement.

#### 6. Strengthening communities – integrating TODs into the surrounding community

- Provision of retail outlets and services to meet major weekly shopping and daily needs
- A permeable street network that prioritises the needs of pedestrians and cyclists through facilitating connectivity and includes the provision of end-of-journey facilities where possible
- Pedestrian areas that are convenient and safe
- A greenway aligning the transit corridor that links with open spaces and pedestrian/cycleways, meets CPTED principles, and enhances biodiversity
- Access via a permeable street network and sustainable transport to health services, education, community/recreation facilities.

#### 7. Mental health and wellbeing – creating spaces for people

- Legible, aesthetic and safe public realm that promotes active living with high quality, well-designed and attractive streetscapes and pedestrian plazas that meet the principles of Crime Prevention Through Environmental Design (CPTED)
- Public spaces/plazas that are well designed to promote safety and to provide amenity for people to meet and socialise or 'watch the world go by'
- Clear provision of main roads that can be the focus for high-quality streetscapes through public art, street furniture, landscaping, street trees for shade.

#### 8. Access to healthy food – protecting the state's food bowl

#### 9. Urban amenity – a sense of place

- Encouraging medium-high density building forms that contribute to the legibility of the street
- Diversity of building form and encouraging residential development at heights that facilitate a sense of connection with the street
- Articulated building facades that face and interact with the primary street frontage
- Seamless integration of the public and private realm to facilitate passive surveillance and therefore a sense of safety and street activation
- Development that encourages activation of the site after-hours
- Minimising the visual impact of car parking.

#### 10. Workplace access and amenity – local jobs for local people

- Creation of 3,000 additional job opportunities, including within retail and mixed-use development, to increase diversification of employment and net additional jobs within the transit corridor
- Access via sustainable transport to education services
- Creation of an urban environment that is an attractor for investment and development.

#### 11. Climate change adaptation and mitigation measures – creating comfortable environments

- Maximise energy efficiency through thermally and energy efficient buildings including use of renewable energy
- Maximise water conservation, and stormwater capture and recycling including through use of water sensitive urban design
- Minimise the urban heat island effect through site 'greening'
- Preservation and enhancement of open space to incorporate water sensitive urban design
- Enhancement of existing open space and development of a greenway to increase biodiversity
- Minimise the use of private vehicles as the dominant form of transport to reduce greenhouse emissions.

## Integrated assessment criteria for Castle Plaza Development Plan Amendment wellbeing assessment

Domain	Assessment Criteria
Workplace Access and Amenity	Employment and economic diversification
	Access to education and training services
	Diversity of type and size of businesses
	Broadband access
Healthy Environments	Water use
	Water sensitive urban design
	Greenhouse gas emissions
	Outdoor air quality
	Indoor air quality
	Noise – outdoors in the public realm
	Noise – indoors in the private realm
	Biodiversity
Physical Activity	Permeable neighbourhoods linking with surrounding areas
	Connectedness – destinations within the CPD site
	Active transport
Sustainability and vibrancy	Integration – mix of land uses
	Open space
	Net housing density and diversity
Mental health and wellbeing	High amenity streetscapes
	Crime prevention through environmental design (CPTED)
Social inclusion and cohesion	Building design and flexibility
	Affordable housing
	Housing tenure
	Inclusive design process
Sense of place	Streetscape legibility
	Structure – street connectedness
	Afterhours use of sites
	Community and civic space in commercial area
	Art, celebration of community identity and culture
Accessible public transport	Public transport access
	Travel modes
	Residential car parking
	Retail car parking
	Office car parking
Climate change mitigation	Energy efficient commercial building design
	Energy efficient residential building design
	Use of renewable energy
Access to healthy food	Access to healthy food

## APPENDIX 3: DRAFT CRITERIA FOR CANTERBURY WATER MANAGEMENT STRATEGY ASSESSMENT

Social (human and social)	Economic (produced and financial)
Trust in institutions/processes Sense of community/place Whanaungatanga Informal communication networks Local knowledge Physical health of people Mental health of people Skills in communities Manaakitanga (sharing and caring for each other) Arable farming knowledge/skill Dry stock farming knowledge/skill Dairy farming knowledge/skill Communal decision-making	Schools, community halls, etc. Roads, bridges Dams and impoundments Electricity generation plant & lines Irrigation infrastructure Water treatment and distribution infrastructure Farms (+ stock & machinery) Irrigated land Irrigable land Public finance Private finance Ngāi Tahu finance River-based tourism business
Environmental (natural)	Cultural
Air Groundwater free from contaminants Surface water (at ecosystem-sustaining flows) Mauri (natural state of being) Reserve land (DOC estate) Native bush in sustainable state Native birds in sustainable populations Native bird habitat Native fish in sustainable habitat Introduced fish Coastal sediment budget Whenua Soils	Regional identity Tastes (music, art, food, dress) Whakapapa Sense of belonging Attitudes and dispositions Customary rights Sense of time Culture and traditions Ahi kā Language and linguistics/Te reo Tikanga and kawa Mana and rangatiratanga Monuments and significant historical sites

English translations of Māori terms are listed and translated or interpreted in the Glossary.

Participants in the assessment workshop introduced a fifth set of criteria addressing the strategy implementation process.

## APPENDIX 4: LAND USE RECOVERY PLAN – AN EXAMPLE OF THE INTEGRATED ASSESSMENT PROCESS

In 2013 staff from Environment Canterbury, Canterbury District Health Board and Christchurch City Council carried out an integrated assessment. The integrated assessment addressed the draft Land Use Recovery Plan early in the drafting process to assess how well the plan met identified criteria. The assessment was undertaken three parts, as set out below. It also met, in part, the requirement to show how consultation had influenced the preparation of the draft plan.

For stage one of the integrated assessment, experienced staff from the partner agencies, along with an expert practitioner, developed 37 criteria reflecting desired outcomes for recovery. The criteria drew on principles within guidance and strategy documents, previous impact assessments, other policy documents and iwi management plans. Respected members of professional institutes and organisations within Christchurch were invited to a full-day workshop to agree the criteria and then score the preliminary draft plan against those criteria. A long list of recommendations from the workshop were provided to the team to inform the draft plan before it was sent out for consultation.

Stage two involved a follow-up workshop, held while the draft plan was being consulted on. The participants were largely pleased to find that the draft plan now included many of the recommendations from the first integrated assessment. They made further recommendations, although far fewer than the number they made during stage one.

For stage three, staff from Environment Canterbury and the Canterbury District Health Board made the final analysis of the draft plan. The analysis identified only a limited number of recommendations not already incorporated in the plan. Of those, the majority required further detail or greater direction, rather than being missing altogether. Monitoring, review and implementation of the draft plan and its actions will ensure that these issues are addressed in restoring and enhancing greater Christchurch.

The stages of the integrated assessment worked alongside the draft plan as it was being developed. They assisted its development, checked its content and provided recommendations to strengthen and improve it. The results of this assessment were provided to the plan authors immediately after each workshop so they could re-draft aspects of the plan in a timely manner. Authors were also part of the process so knew what results were coming and why.

An evaluation of the integrated assessment in 2014 concluded the process had an important and valuable influence on the final plan. Many of the recommendations, or concepts and principles behind the recommendations, are clearly visible in the re-drafts. Much discussion focused on the relationship between land use and land use recovery – but what was clear from participants in the integrated assessment process was that the final plan needed to respond to the opportunity to build back better, to protect the environment and to build strong and resilient communities.

## APPENDIX 5: RESOURCES FOR WORKSHOP ONE

Experience has shown the following resources are needed for workshop one:

- two sets of large-format A0 sheets of criteria grouped into four groups of approximately equal length (note each sheet has four blank 'formed' spaces for additional criteria at the end)
- one packet of Blu-Tak
- one packet of thumb tacks
- eight large bulldog clips
- eight whiteboard pens – two blue, two green, two black and two red
- five fine-point black felt pens
- four butcher paper 'pads'
- four 'boxes' of self-adhesive coloured dots – one box matching each of the colours of the whiteboard pens above
- good-quality name cards (plastic cover) with pre-printed names of all attending, in a font large enough to be read easily
- master list of all attendees
- handouts of agenda, vision and objectives, one-page summary of what integrated assessment is
- data projector (and person to set up and ensure operational)
- laptop (and cords) compatible with data projector
- long extension lead
- multi-plug
- two large printing whiteboards
- 60 chairs
- projection screen.

## APPENDIX 6: AGENDA AND RUN SHEET FOR WORKSHOP ONE

Time	Agenda	Run sheet notes
8.00am	Set up room	<p><b>Team</b> sets up with theatre-style seating towards one end for all plenaries. Small-group seating on three sides facing a wall/whiteboard suitable for hanging large-format sheets. (The fourth group will work in the plenary space.) Arrange spacing and distribution to reduce noise interference between groups.</p> <p>Provide some form of colour 'flag' so individuals can find their space or small-group breakout. <b>Facilitators</b> all know which group they are facilitating.</p> <p><b>Admin person</b> sets up 'Registration' table near door with name tags, attendee lists and duplicates of pre-circulated material. Name tags are pre-coded with small-group membership, as identified by colour self-adhesive 'dots'.</p> <p><b>Admin person</b> ensures PowerPoint is loaded and projector is working.</p> <p><b>Team</b> sets up A0 sheets and butcher paper at each small-group station. Ensure a pair of different coloured marker pen at each station (ideally the same colour as the group ID).</p>
9.00am	Pre-workshop tea/coffee	<b>Team</b> is available to meet and greet people as they arrive. It is important to welcome people and appear professional with our setup complete.
9.30am	Introductory plenary	<p>Open with mihi/karakia (tangata whenua) and welcome by project senior.</p> <p><b>Project senior</b> presents a quick overview of the whole consultation, design and plan preparation process. Then they introduce the team – IA process lead, facilitators and note-takers – and describes each of their roles. Subject specialists and planner/project advisors describe their own roles – all stand up to be seen.</p> <p><b>IA Process Leader</b> presents overview slides for workshop one, including describing agenda for the day.</p> <p>Explain the colour coding of tags and cover housekeeping (toilets, emergency evacuation, coffee and tea availability, etc.).</p> <p>Invite questions/comments before we get going and ask the appropriate person from the team to respond.</p>
10.15am	Draft assessment criteria introduced	<p><b>IA Process Leader</b> introduces the draft assessment criteria, refers to handout of the xyz criteria, talks about how they were developed – what they are and what they are not (if relevant, note a mana whenua team is independently preparing and applying criteria set reflecting tikanga and iwi/rūnanga issues) and how they've been separated (and how people will get a chance to consider broader issues throughout the day).</p> <p>Tell participants what part of the room they are going to.</p>
Coffee/tea available to be taken into small groups – no formal break		
10.25am	Small-group breakout to review draft assessment criteria	<p><b>Team</b> hustles people into their groups; <b>facilitators</b> beckon people to come over and sit down.</p> <ol style="list-style-type: none"> <li>1. Group members introduce themselves briefly.</li> <li>2. Check that everyone knows the task in front of them and they are OK to be in this group.</li> <li>3. Review the objective statement(s) and become familiar with the draft assessment criteria for this pillar.</li> </ol> <p>Tackle the criteria one at a time to confirm wording and scale steps (keep emphasising the need for one variable per scale).</p> <p>If ideas come up about 'missing' criteria, note them on butcher's paper for the later session.</p> <p><b>Facilitators</b> remind participants that they are dealing with one quarter of the assessment criteria but will get to review the rest of them. Get people to first scan through their criteria and ask for any general comments on them. Then begin at the top and ask participants to discuss each criterion in turn. <i>Remember the criteria have been designed to reflect what a plan can do, not anything else.</i> For example, for a land use plan the criteria can address which activities to include and their general placement, not the control of them.</p> <p>Take 5 minutes at most to cover steps 1 and 2 (introductions, checking OK) and then about 5 minutes per criterion (step 3). The group will start slowly with criteria but will get faster.</p> <p><b>IA Process Leader</b> will 'float' to get a feel for the issues for the next feedback session.</p> <p>Coffee available during this time – just to collect quickly and bring back to the group.</p>

11.25am	Groups circulate to review work of others	<p>Groups circulate clockwise, taking the pen colour-coded to their group with them.</p> <p><b>Facilitators</b> stay with their group's sheet to answer questions of circulating participants. They note any useful or challenging comments on butcher's paper, using the coloured pen from the visiting group. (Note individual's name.)</p> <p>Keep an eye on time and encourage folk to move on to the next base after 5 minutes.</p>
11.55am	Feedback plenary	<p><b>IA Process Leader</b> introduces and manages the plenary. In addition to being sound process, this step is needed because some folk will have an interest in more than one set of criteria and this gives them an opportunity to debate selection of criteria.</p> <p><b>Facilitators</b> report back on each group's 'hotly debated and less-clear' criteria only.</p> <p>This needs to be an efficiently run process with focus on strongly debated or contested issues.</p> <p><b>Facilitators</b> each have 3–4 minutes to describe to the plenary about two to three criteria that were subject to change, leaving some time for comments from the participants. (There is not really time for discussion but park big issues and reconvene with individuals with strong views.)</p>
12.15pm	Small-group completeness check of criteria	<p><b>Participants and facilitators</b> return to their group's base.</p> <ol style="list-style-type: none"> <li>1. Check that everyone is OK with how the workshop is going so far.</li> <li>2. Review earlier work, consider feedback from circulating groups and then focus on the objective statement(s).</li> <li>3. Consider if this is a complete set of criteria 'for checking if the design/plan meets those objectives'.</li> <li>4. If some ideas come up about 'missing' criteria, note them at the bottom of the sheet.</li> </ol> <p>They may think about replacement criteria or identify any considered redundant.</p> <p><b>Facilitators</b>, if needed, remind participants that: they are dealing with one quarter of the assessment criteria but will get to review the rest of them; and the criteria have been designed to reflect what a plan can do, not anything else i.e. it can address the inclusion and general placement of activities not the control of them. Don't get bogged down in wordsmithing; get the sense of each criterion, focus on getting a clear description and then move to the next (if more than one). After any new criteria are added, start them thinking about scale steps (this is not so important as the team can likely more quickly draft them later).</p>
12.35pm	Lunch	<p>Caterers are prepared for providing lunch up to 10 or 15 minutes early or late.</p> <p>Bless food (e.g., performed by mana whenua or Pasifika participant).</p> <p><b>Facilitators</b> make any necessary changes to create a large clean second sheet of assessment criteria, including adding (and if necessary completing) further criteria and scale steps.</p>
1.00pm	Set top and bottom lines, plenary introduction	<p><b>IA Process Leader</b> introduces this session. Describe (with illustrations) the process of setting top and bottom lines and the role of technical advisors in assisting them. Take participants through set of slides describing small-group work. Describe where each group will go.</p>
1.10pm	Small-group breakout to set top and bottom lines	<ol style="list-style-type: none"> <li>1. <b>Facilitator</b> checks that everyone knows the task in front of them and they are OK to be in this pillar.</li> <li>2. <b>Facilitator</b> introduces the technical advisors assigned to the group.</li> <li>3. Participants tackle the criteria one at a time – first set the bottom line, then top.</li> <li>4. Review after completing all.</li> </ol> <p>The bottom lines (circle) and top lines (square) do not need to sit on a scale step and can sit at a mid-way point. There is enough time for one criterion to be completed each 4 minutes. Use unique coloured pen.</p>
1.45pm	Groups circulate to review work of others	<p><b>Facilitators</b> stay with their group's score sheet to explain top and bottom line positions. If a participant advocates a well-argued alternative position, add it in the pen colour of the 'visiting' group.</p> <p><b>IA Process Leader</b> keeps an eye on time and encourages folk to move on to the next base after 5 minutes.</p>
2.05pm	Feedback plenary	<p><b>IA Process Leader</b> introduces and manages the plenary.</p> <p><b>Facilitators</b> each have 7 minutes to report back on each group's selection of top and bottom lines and comment on changes suggested by other groups.</p>
2.35pm	Wrap/close	<p><b>Project senior</b> thanks everyone on behalf of the team and explain how they can get access to the results of today's work. Then provide a reminder of the next steps, ideally advising of the date of workshop two (if known). Close with karakia (if opened with one).</p>