

Briefing to the Incoming Ministers

To:	Minister of Finance – Hon Grant Robertson Minister of Agriculture – Hon Damien O'Connor
Copy to:	Minister for Regional Economic Development– Hon Shane Jones ⁴ Minister for Economic Development – Hon David Parker ⁴ <i>Redacted</i> ¹
From:	Crown Irrigation Investments Limited (CIIL or the Company)
Date:	31 October 2017
Contacts:	Debbie Birch: Chair – <i>Redacted</i> ¹ Murray Gribben: Chief Executive Officer - <i>Redacted</i> ¹

RELEASED UNDER THE OFFICIAL INFORMATION ACT

Reason for redaction under the Official Information Act 1982:

1. Section 9.2(a) – to protect the privacy of natural persons, including that of deceased natural persons.
2. Section 9.2(g)(i) – maintain the effective conduct of public affairs through the free and frank expression of opinions by or between or to Ministers of the Crown or members of any organisation or officers and employee of any department or organisation in the course of their duty.
3. Section 9(2)(j) – enable a Minister of the Crown or any department or organisation holding the information to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations).

Additional information:

4. Briefing was not sent to Minister.
5. December 2017 no longer Kurow Duntroon's target financial close date.



Introduction

The purpose of this Briefing to the Incoming Ministers (BIM) is to provide the incoming Minister of Finance and Minister of Agriculture with an overview of CIIL, including CIIL's:

- ◊ Establishment policy rationale;
- ◊ Current mandate, purpose and functions;
- ◊ Board and management;
- ◊ Achievements to date;
- ◊ Key projects in progress; and
- ◊ CIIL's funding arrangements.

Executive summary

- ◊ CIIL is a Crown Entity Company. Our purpose is to enable the development and construction of off-farm regional water storage and distribution infrastructure where the Company identifies projects that have the potential to generate long term economic benefits for New Zealand.
- ◊ Our mandate also allows us to invest in water storage and distribution infrastructure to provide environmental benefits.
- ◊ CIIL invests in the construction of water storage and distribution infrastructure projects by way of loans, with capital returned over a 10-15-year period.
- ◊ Since establishment, CIIL has assisted and/or funded five regional water storage and distribution infrastructure projects to construction.
- ◊ CIIL has an experienced investment team and board, who have developed a robust investment and development model for infrastructure projects.

Investment activity

- ◊ CIIL is currently working with 11 regional water storage and distribution infrastructure projects including providing development grant funding (development funding), construction investment funding (construction funding) and commercial guidance, as set out in Appendix 1.
- ◊ In anticipation of ongoing Crown support, project sponsors and CIIL have invested capital in the development of these projects.
- ◊ Development and construction of these projects is unlikely to continue without ongoing Crown support to mitigate demand risk.

Construction funding

- ◊ The 11 projects in progress would require total construction funding of **Redacted²**. We have excluded forecast projects that have not yet commenced.
- ◊ The previous Government signalled that up to \$400 million would be made available. To date, \$183.0 million has been appropriated. Taking into account CIIL's operating requirements, an additional **Redacted²** would be required to fund the pipeline that is currently in progress.
- ◊ CIIL has one existing loan agreement, to provide construction funding of \$65.0 million to Central Plains Water Limited Stage 2. \$18.7 million has been advanced to date and \$46.3 million will be advanced in the period to September 2018.
- ◊ Of the remaining 10 projects:
 - Construction funding terms sheets have been agreed with two projects, Kurow Duntroon and Waimea, subject to conditions precedent being met. Construction funding required for these two projects is **Redacted³**.
 - A terms sheet with Hunter Downs has been agreed for construction funding of **Redacted³** subject to conditions precedent being met.
 - Hurunui and Flaxbourne are progressing and both have development funding contracts. As they progress, additional development funding will be required to match sponsor equity. Preliminary



terms sheet discussions for construction funding indicates that **Redacted^{2,3}** will be required for these two projects.

- The remaining five projects are in earlier stages of development. Construction funding required for these projects is currently estimated as **Redacted²**

Development funding

- ◊ \$56.2 million of development funding has been appropriated for CIIL.
- ◊ Of this, \$14.1 million has been contracted.
- ◊ Of the \$42.1 million not yet contracted:
 - **Redacted²** would be required to continue funding the ten projects that are currently in progress, through to construction commencement.

Key activities and decisions to be made in the next 6-8 months

- ◊ Kurow Duntroon is targeting financial close in **December 2017⁵** and Waimea is targeting financial close in June 2018.
 - Our standard process when working towards financial close would see CIIL management consult with shareholders via the Treasury (as required under the Owners Expectations Manual) and gain final board approval immediately prior to financial close (having briefed the CIIL board and the Treasury regularly during the transaction process).
 - Based on Kurow Duntroon's current target date for financial close, CIIL will be looking to consult with shareholders in relation to this investment in **December 2017⁵**. The Treasury will be provided with a copy of CIIL's investment paper.
 - CIIL will run a similar process for Waimea in April/May 2018.
 - Neither investment will represent a 'major transaction' as per the Companies Act and therefore they do not require shareholder approval under the Companies Act.

◊ **Redacted²**

- ◊ CIIL will be making a call on capital of ~\$16 - \$18 million in December 2017, for payment in January 2018. This is to fund investment advances due to Central Plains Water Limited Stage 2 and CIIL's operating expenditure through to 30 June 2018.

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Policy rationale

- ◊ The primary rationale for the Crown to invest in the construction of water storage and off-farm distribution infrastructure was to expedite the development of “optimal build” proposals that maximise the long term economic growth benefits from irrigation in the context of a reformed water management system based on setting and managing within limits for water quality and quantity.¹
- ◊ While it is well recognised that substantial economic benefits result from irrigation, less well recognised are the environmental benefits that result from new water storage and distribution infrastructure. Water storage and distribution facilities often result in higher minimum river flows and reduced pressure on groundwater aquifers. Water users are also required to comply with best practice farm environmental management.

CIIL’s mandate, purpose and functions

- ◊ CIIL acts on behalf of the New Zealand Government as an investor for regional water storage and distribution infrastructure projects.
- ◊ Alongside other partners, CIIL invests in infrastructure projects that would not be constructed to the same scale, or would not be constructed at all, without Crown support.
- ◊ CIIL was established with two primary functions, being co-investment in water storage and distribution infrastructure projects and providing commercial guidance to project sponsors.
- ◊ Since establishment, CIIL has identified and implemented two additional functions in order to strengthen its business model, these being:
 - Providing development grant funding to projects as they develop; and
 - Providing loans to local authorities to fund environmental benefits of water storage infrastructure.
- ◊ CIIL’s purpose and functions as outlined in its constitution (attached as Annex 1) are as follows:

“To enable the development and construction of off farm regional irrigation infrastructure where the company identifies irrigation scheme proposals that have the potential to generate long term economic benefits from irrigation for New Zealand, primarily by:

 - *Co-investing in irrigation schemes;*
 - *Providing loan funding to local authorities to enable local authorities to support the construction of water storage and/or distribution infrastructure associated with irrigation schemes;*
 - *Providing grants to irrigation schemes in development; and*
 - *Applying commercial expertise and leadership to irrigation schemes.”*

Company form

- ◊ CIIL was incorporated as a limited liability company on 1 July 2013 under the Companies Act.
- ◊ CIIL is a Crown Entity Company under Schedule 2 of the Crown Entities Act.
- ◊ The shareholders of CIIL are the Minister of Finance and the Minister for Primary Industries in their capacities as Ministers, each holding 50 percent of the issued share capital.
- ◊ The commercial operations division of the Treasury assists the shareholders in monitoring CIIL.

Board and management

- ◊ The business and affairs of CIIL are guided by the board of directors (the board).
- ◊ The board is responsible for approving all construction funding decisions and development funding decisions over \$0.5 million.
- ◊ Responsibility for the day-to-day operation and administration of CIIL is delegated to the CEO. An organisation chart is attached as Appendix 2.
- ◊ CIIL has an experienced investment team with a diverse skill set.

¹ EGI Min (12) 29/5.



- ◊ CIIL has a proven track record of structuring investments between the Crown, regional and local councils and the private sector.
- ◊ CIIL is focused on investing for economic benefits and on minimising the economic cost to the Crown.
- ◊ CIIL has developed and utilised a disciplined and robust granting and investment model.
- ◊ CIIL has strong relationships with local authorities, advisors, banks and investors.
- ◊ Organisational capability is well established (e.g. IT, HR, Finance, Policies).

Achievements to date

- ◊ CIIL invested \$6.5 million in Central Plains Water Stage 1 in September 2014. This investment was fully repaid in December 2016.
- ◊ CIIL committed to invest \$65 million in Central Plains Water Stage 2 in December 2016. \$18.7 million has been advanced to the scheme, with the remainder to be advanced by September 2018.
- ◊ CIIL provided development funding and commercial guidance to the Central Plains Water Sheffield scheme. CIIL construction funding was not required.
- ◊ CIIL provided commercial guidance to North Otago Irrigation Company and Barhill Chertsey Irrigation. CIIL construction funding was not required.
- ◊ CIIL has entered into 19 development funding contracts over time.
- ◊ CIIL has provided commercial guidance to all projects in the pipeline and helped facilitate their progress towards construction.

Investment pipeline and pipeline progress

The diagram below outlines CIIL's high level investment pipeline (excluding projects not in progress).

Tranche 1: Under construction or in operations				Tranche 2: Immediate and short-term Projects		Tranche 3: Long-term projects			
Central Plains Water Stage 1 Central Plains Water Stage 2 Central Plains Water Sheffield North Otago Irrigation Company Barhill Chertsey Irrigation				Kurow Duntroon Irrigation Scheme Waimea Water Flaxbourne Community Scheme Hurunui Water Project Hunter Downs Water		Emu Plains Irrigation Scheme Manuherikia Catchment Water Strategy Group Wairarapa Water		Northland Orari Temuka Opihi Pareora	
FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23

Further detail on the pipeline is provided in the pipeline snapshot attached as Appendix 1. Project summaries are attached as Appendix 3.

Tranche 2A: Immediate projects

- ◊ Construction funding terms sheets have been agreed with two projects, Kurow Duntroon and Waimea, subject to due diligence and conditions precedent being met.
- ◊ Construction funding required for these two projects is **Redacted³**
- ◊ Kurow Duntroon and Waimea are targeting financial close in **December 2017⁵** and June 2018 respectively.
- ◊ The sponsors of these two projects have invested in excess of \$3.2 million in the development of these projects, of which Crown has invested \$1.6 million.

Tranche 2B: Short-term projects

- ◊ A terms sheet with Hunter Downs has been agreed for construction funding of **Redacted³** subject to conditions precedent being met.
- ◊ Hurunui and Flaxbourne are progressing and both have development funding contracts. As they progress, additional development funding will be required to match sponsor equity. Preliminary terms sheet discussions for construction funding indicates that **Redacted²** will be required for these two projects.



- ◊ Flaxbourne and Hurunui are targeting financial close in April 2018 and September 2018 respectively.
- ◊ The sponsors of these three projects have invested in excess of \$15.2 million in the development of these projects, of which the Crown has invested \$7.2 million.

Long-term projects

- ◊ The remaining five projects are in earlier stages of development.
- ◊ In anticipation of ongoing Crown support, project sponsors and CIIL have invested capital in the development of these projects.
- ◊ Development and construction of these projects is unlikely to continue without ongoing Crown support.
- ◊ Construction funding required for these projects is currently estimated as **Redacted²**
- ◊ The sponsors of these five projects have invested in excess of \$11.2 million in the development of these projects, of which the Crown has invested \$5.6 million.

Shareholder approval and consultation

- ◊ CIIL regularly briefs the Treasury on upcoming transactions and negotiations (no surprises).
- ◊ CIIL formally consults with shareholders prior to reaching financial close on any project (as per the Owners Expectations Manual).
- ◊ CIIL seeks shareholder approval for 'major transactions' as per the Companies Act.

Funding

CIIL is funded through two separate appropriations under Vote Primary Industries:

- ◊ Crown Irrigation Investments Limited, a non-departmental other capital multi-year appropriation.
 - The purpose of the appropriation is to fund the Crown's investment in CIIL.
 - \$120m is appropriated from 1 July 2013 – 30 June 2018. \$63m is appropriated from 1 July 2017 – 30 June 2021.
 - These appropriations are used by CIIL's shareholding Ministers to subscribe for uncalled equity in CIIL. This equity is then called as required by CIIL, and is used to make investments in projects and fund CIIL's operating expenditure.
 - Construction funding is provided to a project by way of a loan. The expectation is that the capital will be returned to CIIL and therefore returned to the Crown.
 - Subject to the continuance of construction funding, the revenue generated from the loans is expected to be sufficient to cover CIIL's operating expenditure.
- ◊ Water Storage and Irrigation Investment Proposals, a non-departmental other operating multi-year-appropriation.
 - The purpose of this appropriation is to fund the preparation of development proposals for irrigation schemes to an investment ready stage.
 - The value of this appropriation is \$59.1m over the period 1 July 2016 – 30 June 2021, of which \$56.2m has been allocated to CIIL.
 - CIIL's access to this funding is set out in a funding agreement between MPI and CIIL.



Construction (capital) funding

The table below outlines how much has been appropriated for CIIL to date and the construction funding requirements of the pipeline.

Crown Irrigation Investments Limited MYA		(\$m)
Budget 2013		80.0
Budget 2014		40.0
Budget 2017		63.0
Total appropriated to date		183.0
Current investment in Central Plains Water Stage 2		-65.0
Operational expenditure (2013 - 2018)		-14.0
		79.0
Appropriation remaining		104.0
Construction funding Waimea (as per agreed term sheet)		-35.0
<i>Redacted²</i>		

Development funding

The table below outlines the development funding appropriation and development funding requirements to get all projects in the pipeline through to construction commencement.

Water Storage and Irrigation Investment Proposals MYA		(\$m)
CIIL allocation		22.5
Underspend from previous allocation		7.0
Additional funding received through Budget 2017		26.7
		56.2
Development funding payments 1 July 2016 - 30 June 2017		-8.5
Development funding payments 1 July 2017 - 30 September 2017		-1.2
Development funding payments remaining under current contracts		-4.4
<i>Redacted²</i>		



List of Annexes

1. CIIL Constitution (as updated August 2017)

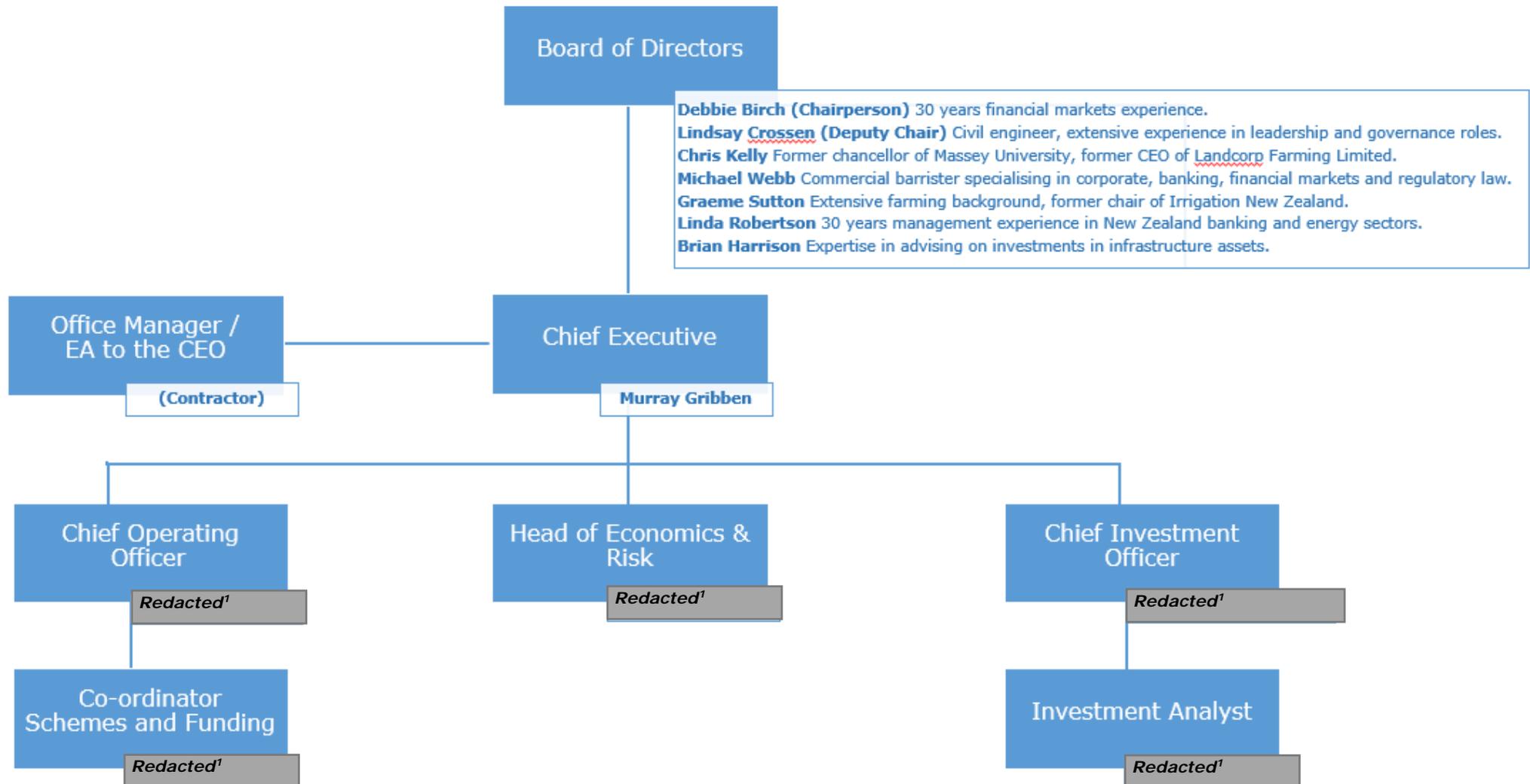


Appendix 1: Pipeline snapshot

Project information				Crown development funding			Crown construction funding	
Project name	Estimated irrigated hectares (ha)	Status	Current development phase*	Historic funding from MPI and CIIL (\$m)**	Balance of funding under current contract (\$m)	Additional funding required to reach construction commencement (\$m)	CIIL investment (\$m)	Target construction start date
Tranche 1: Projects under construction or in operation								
1 Central Plains Water Stage 2	20,000	Loan agreement in place	6: Construction	7.09	-	-	65.00	Dec-16
Tranche 2A: Immediate projects - terms sheets agreed								
2 Waimea Community Dam	4,500	Term sheet agreed Development contract in place	5: Project Commitment	1.42	0.35	Redacted ²	35.00	Jun-18
3 Kurow Duntroon	5,500	Term sheet agreed Development contract in place	5: Project Commitment	0.15	0.24	Redacted ²	Redacted ²	Dec-17
Tranche 2B: Short term projects								
4 Hurunui Water Project	21,000	Development contract in place	5: Project Commitment	3.19	2.24	Redacted ²	Redacted ²	Aug-18
5 Flaxbourne Community Irrigation Scheme	2,200	Development contract in place	4: Feasibility	0.35	0.38	Redacted ²	Redacted ²	Apr-18
6 Hunter Downs	12,000	Term sheet agreed	5: Project Commitment	4.07	-	Redacted ²	Redacted ²	Jun-18
Tranche 3: Long term projects								
7 Water Wairarapa	8,000	Development contract in place	3: Pre-feasibility	3.62	0.10	Redacted ²	Redacted ²	Sep-21
8 Manuherikia	18,000	Development contract in place	3: Pre-feasibility	1.08	0.77	Redacted ²	Redacted ²	Sep-21
9 Emu Plains	7,000	Development contract in place	3: Pre-feasibility	0.12	0.03	Redacted ²	Redacted ²	Unknown
10 Orari-Temuka-Opihi-Pareora (OTOP)	21,300	Development contract in place	2: Scoping	0.55	0.29	Redacted ²	Redacted ²	Unknown
11 Northland Irrigation Project	2,000	Application pending	2: Scoping	0.24	-	Redacted ²	Redacted ²	Unknown
Total				21.86	4.40			
* Further detail on the development phases is attached as Appendix 4								
**This funding has been provided from the current appropriation and previous appropriations								



Appendix 2: Organisation Chart



Appendix 3: Scheme summaries

Central Plains Water Limited (CPWL) Stage 2	
Project sponsor	CPWL
Project funders	ANZ, Westpac, CIIL, farmer equity
Crown support	<ul style="list-style-type: none"> ▪ Development grant funding, \$7.1m ▪ Loan agreement in place, \$65m
Phase	6: Construction
Geographic location	Canterbury plains
Size of irrigable area	20,000 ha
Land use	Dairy and Arable Cropping
Project summary	<ul style="list-style-type: none"> ▪ Stage 2 is a continuation of the CPW Stage 1 infrastructure. It is a fully piped scheme between the Selwyn and Waimakariri Rivers supplying pressurised water to farm gates ▪ Construction underway. Target operations September 2018
Socio-economic benefits	<ul style="list-style-type: none"> ▪ Infometrics report estimates economic benefit Net Present Value (NPV) of ~\$374m ▪ Higher income, employment and community resilience
Environmental benefits	<ul style="list-style-type: none"> ▪ Relieve pressure on groundwater resource ▪ Improved river flows and enhanced water quality ▪ Opportunity for augmentation of Selwyn River

Central Plains Water Limited (CPWL) Sheffield	
Project sponsor	CPWL
Project funders	ANZ, Westpac, farmer equity
Crown support	<ul style="list-style-type: none"> ▪ Development grant funding, \$1.3m ▪ Investment not required due to sufficient farmer uptake
Phase	6: Construction
Geographic location	Canterbury plains
Size of irrigable area	4,300 ha
Land use	Dairy and Arable Cropping
Project summary	<ul style="list-style-type: none"> ▪ Pumped water supply from Waimakariri and Kowai rivers ▪ Infrastructure includes 2.08m³ storage pond with piped network ▪ While the Sheffield infrastructure is stand-alone, Sheffield benefits from existing policies, processes and capability in place for Stage 1 ▪ Construction underway. Target operations November 2018
Socio-economic benefits	<ul style="list-style-type: none"> ▪ Higher income, employment and community resilience
Environmental benefits	<ul style="list-style-type: none"> ▪ Relieve pressure on groundwater resource ▪ Improved river flows and enhanced water quality



Kurow Duntroon	
Project sponsor	Kurow Duntroon Irrigation Company
Project funders	CIIL, farmer equity
Crown support	<ul style="list-style-type: none"> ▪ Development grant funding, \$146k paid to date ▪ Development grant funding contract currently in place, \$242k funding remaining ▪ CIIL engaging with KDIC in relation to concessionary financing
Phase	5: Project commitment
Geographic location	North Otago / South Canterbury
Size of irrigable area	5,500 ha
Land use	Dairy, Arable Cropping, Sheep and Beef
Project summary	<ul style="list-style-type: none"> ▪ Proposed scheme involves replacement and expansion of existing infrastructure and increasing scheme capacity from 2,000 ha to 5,500 ha ▪ Infrastructure will consist of a new siphon and a series of distribution pipes and pumps ▪ Target financial close Q4 2017 / Q1 2018
Socio-economic benefits	<ul style="list-style-type: none"> ▪ Insures significant local economy resilience
Environmental benefits	<ul style="list-style-type: none"> ▪ Reduced irrigation takes from tributaries ▪ Supports continued move to more efficient water utilisation

Waimea Community Dam	
Project sponsor	Waimea Irrigators Limited (WIL), Tasman District Council (TDC)
Project funders	TDC, CIIL, Nelson City Council, farmer equity, Ministry for the Environment
Crown support	<ul style="list-style-type: none"> ▪ Development grant funding, \$1.4m paid to date ▪ Development grant funding contract currently in place, \$353k funding remaining ▪ CIIL agreed terms for construction financing with WIL and TDC
Phase	5: Project commitment
Geographic location	Tasman
Size of irrigable area	4,000 – 5,000
Land use	Horticulture (e.g. apples, hops)
Project summary	<ul style="list-style-type: none"> ▪ Proposed scheme comprises a 53m high dam in Lee Valley, releasing water into the Waimea River as required to augment the aquifers
Socio-economic benefits	<ul style="list-style-type: none"> ▪ Provide urban water supply ▪ Integral project for maintaining and growing the economic development in Nelson/Tasman ▪ Community resilience ▪ Food security
Environmental benefits	<ul style="list-style-type: none"> ▪ Improved summer river flows ▪ Aquifer recharge



Hurunui Water Project	
Project sponsor	Hurunui Water Project Limited (HWPL)
Project funders	Farmer equity, CIIL, senior bank lender
Crown support	<ul style="list-style-type: none"> ▪ Development grant funding, \$3.2m paid to date ▪ Development grant funding contract currently in place, \$2.2m funding remaining ▪ CIIL and HWPL to commence construction financing negotiations
Phase	5: Project commitment
Geographic location	North Canterbury
Size of irrigable area	21,000 ha
Land use	Dairy, Deer, Arable Cropping, Sheep & Beef
Project summary	<ul style="list-style-type: none"> ▪ Currently completing a detailed design for on-plains storage with a piped distribution network to service up to 21,000 ha ▪ Target financial close Q3 2018
Socio-economic benefits	<ul style="list-style-type: none"> ▪ Deliver significant resilience to the local economy, particularly through periods of drought
Environmental benefits	<ul style="list-style-type: none"> ▪ Reduced top soil erosion ▪ More efficient use of water resources

Flaxbourne Community Irrigation Scheme	
Project sponsor	Marlborough District Council (MDC)
Project funders	MDC, CIIL, farmer equity
Crown support	<ul style="list-style-type: none"> ▪ Development grant funding, \$345k paid to date ▪ Development grant funding contract currently in place, \$389k funding remaining ▪ Construction investment discussions to commence.
Phase	4: Feasibility
Geographic location	Marlborough - Flaxbourne District
Size of irrigable area	2,200 ha
Land use	Viticulture
Project summary	<ul style="list-style-type: none"> ▪ Abstracting water from the Ure River. Due to significant yield from the aquifer below the Ure, a storage dam will not be required ▪ Extraction of water is near the end of the river course and does not pose any environmental concerns ▪ In early 2018 the scheme intends to approach shareholders with a Water User Agreement (WUA) ▪ The scheme is targeting construction commencement in April 2018, with completion in October 2018
Socio-economic benefits	<ul style="list-style-type: none"> ▪ Provide significant community benefit through employment, vibrancy and community well-being ▪ Estimated increase in revenue from wine of ~\$97 million per annum and an economic benefit of ~\$682 million



Hunter Downs Water (HDW)	
Project sponsor	Hunter Downs Water Limited
Project funders	CIIL, irrigator equity, external equity
Crown support	<ul style="list-style-type: none"> ▪ Development grant funding, \$4.1m paid to date ▪ CIIL has agreed a revised term sheet for funding the HDW project. HDW have not been able to source the required equity to date ▪ Most aspects of the project are on hold and CIIL is currently not providing grant funding
Phase	5: Project commitment
Geographic location	South Canterbury
Size of irrigable area	12,000 ha
Land use	Dairy and Arable Cropping
Project summary	<ul style="list-style-type: none"> ▪ Canal and piped scheme with pond storage sufficient to service ~12,000 ha in the area north of the Waimate creek and south of Timaru ▪ Utilise alpine water supply from Waitaki River
Socio-economic benefits	<ul style="list-style-type: none"> ▪ Higher income, employment and community resilience
Environmental benefits	<ul style="list-style-type: none"> ▪ Augmentation of Wainono Lagoon ▪ Improved water quality

Water Wairarapa	
Project sponsor	Greater Wellington Regional Council (GWRC)
Project funders	Potentially irrigator equity, external equity, CIIL, GWRC and local council(s), senior bank lender
Crown support	<ul style="list-style-type: none"> ▪ Development grant funding, \$3.6m paid to date ▪ Development grant funding contract currently in place, \$100k funding remaining
Phase	3: Pre-feasibility
Geographic location	Wairarapa
Size of irrigable area	8,000 ha
Land use	Dairy, Arable Cropping, Horticulture
Project summary	<ul style="list-style-type: none"> ▪ Proposed scheme infrastructure consists of one or more storage reservoirs and a piped distribution network to deliver water to customers ▪ Designed for multiple uses, including irrigation, municipal water supply, environmental and recreational river flows
Socio-economic benefits	<ul style="list-style-type: none"> ▪ Higher income, employment and community resilience
Environmental benefits	<ul style="list-style-type: none"> ▪ Relieve pressure of groundwater resource ▪ Improved river flows and water quality



Manuherikia Irrigation Project	
Project sponsor	WaterCo Limited
Project funders	Potentially irrigator equity, CIIL, local and regional councils, senior bank lender
Crown support	<ul style="list-style-type: none"> ▪ Development grant funding, \$1.1m paid to date ▪ Development grant funding contract currently in place, \$770k funding remaining ▪ Construction investment discussions not yet commenced
Phase	3: Pre-feasibility
Geographic location	Central Otago
Size of irrigable area	18,000 ha
Land use	Agriculture
Project summary	<ul style="list-style-type: none"> ▪ Currently finalising the pre-feasibility phase of development to upgrade and increase the capacity of existing storage and distribution infrastructure to expand the hectares under irrigation; enhance existing irrigation reliability; and meet environmental regulatory requirements ▪ Scheme proposes to increase water storage capacity by increasing the height of Falls Dam ▪ Replacing open races with a piped distribution network will result in water loss savings ▪ A pre-construction Product Disclosure Statement (PDS) is scheduled to be issued to farmers in mid-2018 to raise funds for the feasibility development phase
Socio-economic benefits	<ul style="list-style-type: none"> ▪ Higher income, employment and community resilience ▪ Solution for loss of historic mining rights water
Environmental benefits	<ul style="list-style-type: none"> ▪ Greater environmental / flushing flows for the Manuherikia River ▪ Improve groundwater and surface water quality ▪ Implementation of farm environmental management plans

Emu Plains	
Project sponsor	Emu Plains Irrigation Incorporated
Project funders	Potentially irrigator equity, CIIL, senior bank lender
Crown support	<ul style="list-style-type: none"> ▪ Development grant funding, \$116k paid to date ▪ Development grant funding contract currently in place, \$26k funding remaining ▪ Construction investment discussions not yet commenced
Phase	3: Pre-feasibility
Geographic location	North Canterbury
Size of irrigable area	7,500 ha
Land use	Dairy, Arable Cropping, Sheep & Beef
Project summary	<ul style="list-style-type: none"> ▪ Proposes taking A and B class water from the Waiau River for a pipe and storage scheme on the north bank of the Waiau River ▪ Proposed scheme infrastructure consists of a single intake leading to a pump station to supply water to a buffer storage site. Water will be conveyed to properties via pipeline ▪ Command area includes 4,000ha of existing irrigators who would potentially join the piped scheme and up to 3,500 ha of new irrigators
Socio-economic benefits	<ul style="list-style-type: none"> ▪ Higher income, employment and community resilience
Environmental benefits	<ul style="list-style-type: none"> ▪ Potential retirement of existing water takes, resulting in less river disturbance ▪ Deliver more effective and controlled nutrient management

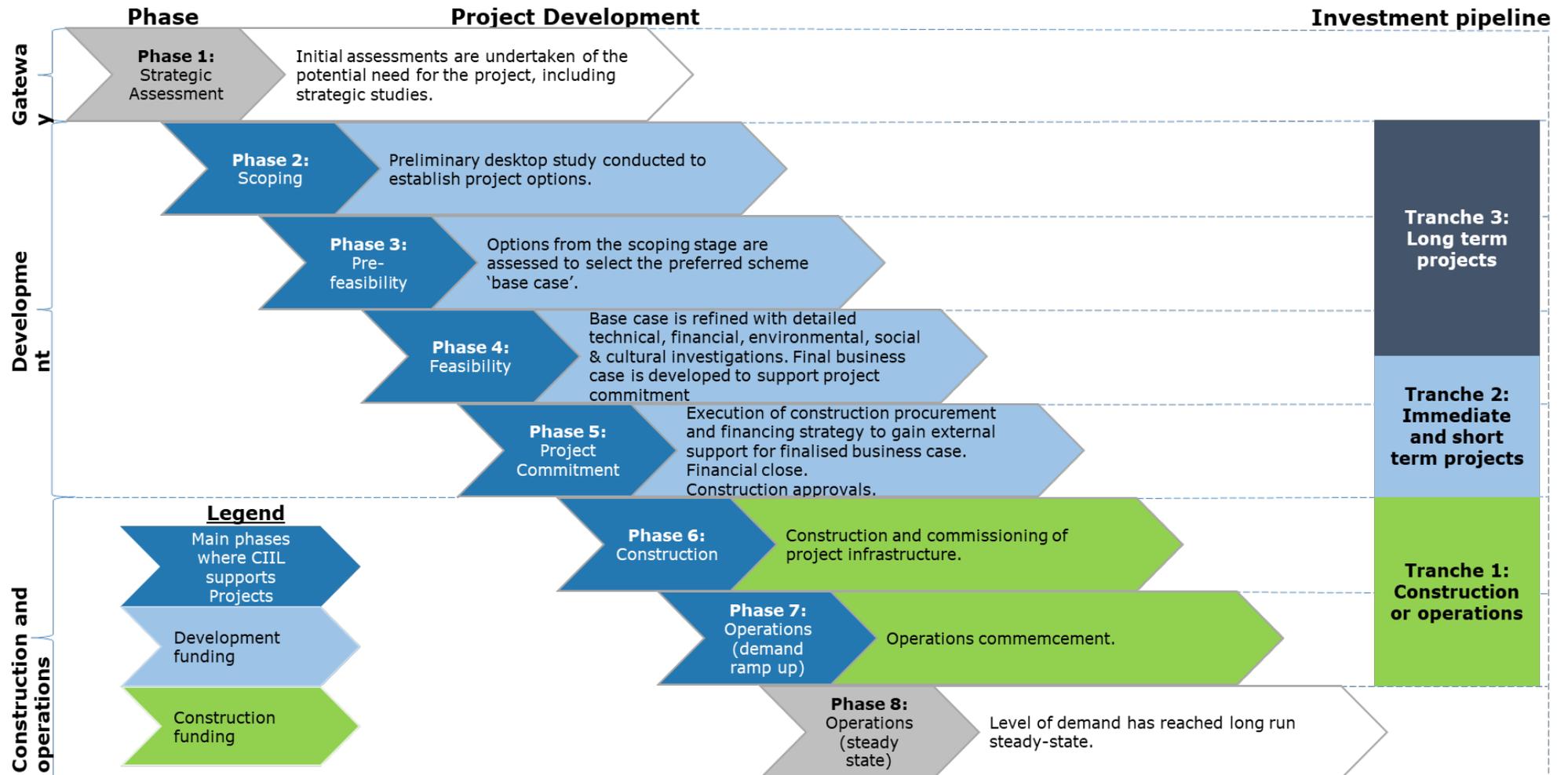


Orari-Temuka-Opihi-Pareora (OTOP) Irrigation Scheme	
Project sponsor	Canterbury Regional Council (CRC)
Project funders	Potentially irrigator equity, CRC, CIIL, senior bank lenders
Crown support	<ul style="list-style-type: none"> ▪ Development grant funding, \$548k paid to date ▪ Development grant funding contract currently in place, \$290k funding remaining ▪ Construction investment discussions not yet commenced
Phase	2: Scoping
Geographic location	South Canterbury
Size of irrigable area	21,000 ha
Land use	Agriculture
Project summary	<ul style="list-style-type: none"> ▪ Pre-feasibility study to explore opportunities to improve chronic water shortages within the South Canterbury region ▪ The study aims to explore tangible options to secure water via various water swap and reallocation agreements and to identify and evaluate preferred infrastructure and distribution options ▪ Work carried out to date suggests that an optimally configured scheme could potentially provide supply top-up for 12,600 ha and provide up to 8,700 ha of new irrigation and stock water supply where appropriate. ▪ Opportunity may exist for water to be utilised by local authorities
Socio-economic benefits	<ul style="list-style-type: none"> ▪ Future proofing the economic potential of the area, in terms of both the reliability of existing supply and the creation of new capacity
Environmental benefits	<ul style="list-style-type: none"> ▪ Reduction in groundwater takes ▪ Improved river flows

Northland Irrigation Project	
Project sponsor	Northland Regional Council (NRC)
Project funders	Potentially NRC, CIIL, land owners (iwi) equity, horticulture industry equity, senior bank lender
Crown support	<ul style="list-style-type: none"> ▪ Development grant funding, \$237k to date ▪ CIIL expect an application for further development grant funding ▪ Construction investment discussions not yet commenced
Phase	2: Scoping
Geographic location	Northland
Size of irrigable area	2,000 ha
Land use	Horticulture (including citrus, kiwifruit, avocados, tamarillos, berries)
Project summary	<ul style="list-style-type: none"> ▪ NRC have issued 'Scoping of Irrigation Scheme Options in Northland' report ▪ NRC and CIIL are currently developing a discrete demand work programme to test the appetite for land owner and horticulture industry Join Venture (JV) arrangements and therefore also support for further irrigation in Northland ▪ This work will act as a precursor to entering a full pre-feasibility phase of development
Socio-economic benefits	<ul style="list-style-type: none"> ▪ Increased employment opportunities ▪ Increased economic wealth for Northland ▪ Because of this potential, the scoping study has been listed as an enabling project on the Tai Tokerau Northland Economic Action Plan
Environmental benefits	<ul style="list-style-type: none"> ▪ Planting of tree crops, such as avocados, will reduce runoff ▪ Groundwater recharge ▪ Improved stream flows ▪ Lake and wetland restoration



Appendix 4: Project development and funding process



Appendix 4: Project development and funding process (continued)

