



CENTRAL PLAINS

WATER

CPWL OVERVIEW PRESENTATION

WET Symposium 2013

Measure to Manage

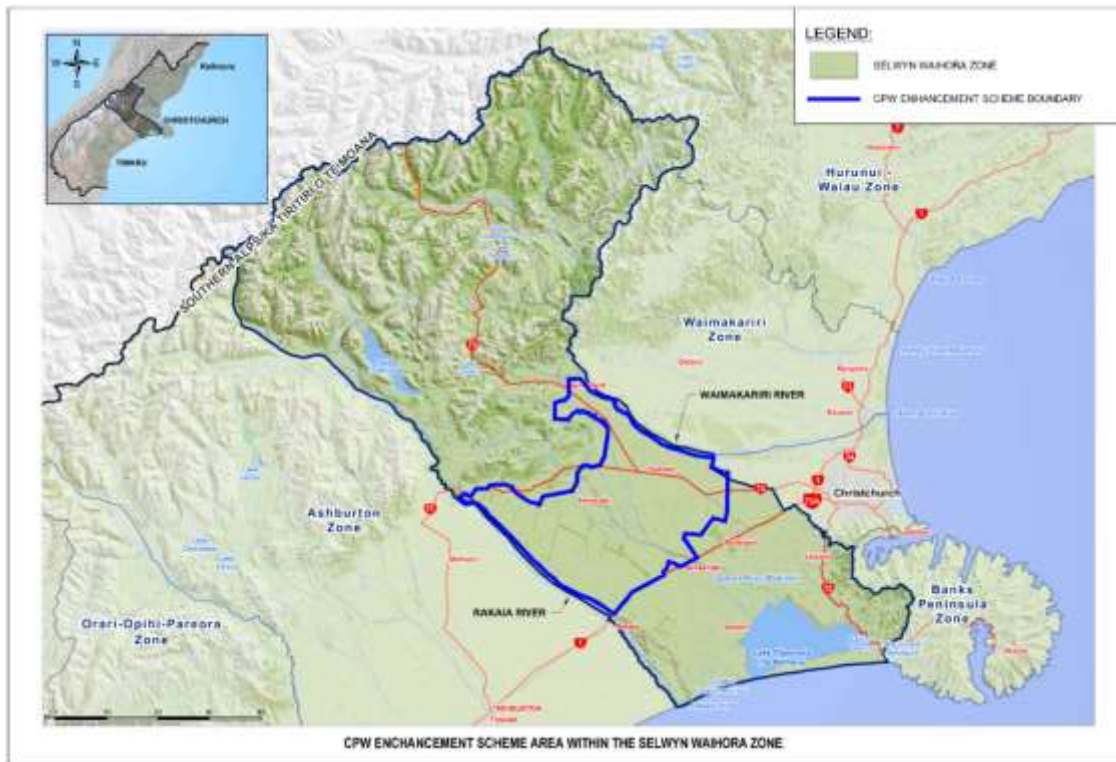
Susan Goodfellow, CPWL Project Manager

November 2013





What is Central Plains Water?



The Central Plains Water Irrigation Scheme is a 100% farmer/shareholder owned company that holds consents (2012) to irrigate 60,000ha of land with run of river water within the Central Plains area.



How does CPW Contribute to the Solution for the Zone?

- 2 years of community consultation and science has established a solution package that will work towards achieving the water quality improvements for Te Waihora.
- It has been identified that a fully operational (60,000ha) CPW scheme which includes 30,000ha of new irrigation, and the transfer of a significant portion of the current 30,000ha irrigated farmland from ground water use to surface water use, is a key part of the solution package.
- The result, CPW will -
 - Contribute toward resolving the over allocated groundwater issue;
 - Contribute to achieving the environmental flows established for the lowland streams.



How does 'Measure to Manage' Apply to CPWL?

- » CPW Sustainability Protocol – to achieve environmental standards
- » Protocol requirements are imbedded in the Consent to use water
- » Key components relating to operations that are critical to achieving good sustainable management outcomes
 - » Kaitiakitanga
 - » Biodiversity and ecosystem management
 - » Efficient water use
 - » Water quality : surface and groundwater
 - » Water quantity: effects on levels and flows
 - » Local communities
 - » Resource use – energy and waste
- » CPW have a suite of consent obligations that set out monitoring and measuring the impacts of the scheme, and establishment of measures to mitigate if trigger levels are exceeded.



What Measures have CPWL implemented to date?

- » **Implement a Ground and Surface Water Monitoring plan (commenced Dec 2012)**
 - » Monitor over 20 bores within the scheme area, new bores implemented Jan/Feb 2014
 - » Monitor surface water sites above and below the scheme area
 - » Summarise the current status and influences to date on water quality and water levels –(baseline study complete Nov 2013)

- » **Establish a Ground and Surface Water Expert Review Panel (established Sept 2013)**
 - Ground water and surface water quality
 - Water quantity (levels and flows)
 - Nitrates and other contaminants
 - Panel to review monthly and quarterly monitoring results and recommend mitigation actions if required.



What Measures have CPWL implemented to date?

» **Water Use Agreement**

- » Scheme Water Use Agreement completed September 2013 and included in September Prospectus

» **Community Liaison Group (established by Dec 2013)**

» **Farm Environmental Management Plans (nutrient and water management)**

- » Template developed to align with the FEMP template being developed for the Zone
- » Farmer training workshops scheduled for March 2014
- » Collect nutrient baseline data – template under development

» **Runanga Advisory Group Established Sept 2013 (Taumutu & Tuahiwi) for consent consultation requirements**

» **Environmental Management Fund (mid 2015)**

» **Environmental Management Fund Committee (mid 2015)**

CPWL Compliance Documents

Sustainability Protocol

- Set policies, procedures, water use requirements and compliance

Water Use Agreement

- Legal contract for water supply, includes requirement to prepare and implement FMP.
- Water Use Levy establishes Environmental Management Fund.

Farm Management Plan (FMP)

- Action Plan for each property to achieve Good Practice.
- Standard and requirements for:
 - Irrigation management – scheme requirements
 - Soils management – design and management requirements
 - Effluent Management – waterway, riparian and biodiversity management

CPW Consent

Consent Conditions

Ground and Surface Water Plan (GSWP)

Ground and Surface Water Expert Review Panel (GSWERP)

Environmental Management Fund (EMF)

Environmental Management Fund Committee (EMFC)

Community Liaison Group (CLG)

CPW Compliance Committee

Independent Audit

Role

Monitoring and Mitigation

- Ground water quality and ground water levels.
- Mitigation and trigger levels.

Monitoring and Mitigation

- Review GSWP and recommend amendments.
- Consult with Te Runanga O Ngai Tahu (Te Waihora and cultural monitoring requirements).
- Review monitoring reports and determine cause of problems
- Advise CRC to review consent conditions if effects cannot be mitigated or remedied to the extent recommended by the GSWERP.

Environmental Enhancement

- Environmental mitigation effects of the scheme outside the requirements of the consent conditions or FMP.
- Environmental management/enhancement projects within the area affected by the scheme.

Environmental Enhancement

- Establish priority for the distribution of the EMF

Monitoring and Compliance

- Provide input to preparation, implementation and amendments of FMP template
- Discuss community concerns regarding operation of CPWL Scheme
- Review and recommend projects for EMF distribution to CPWT and EMFC

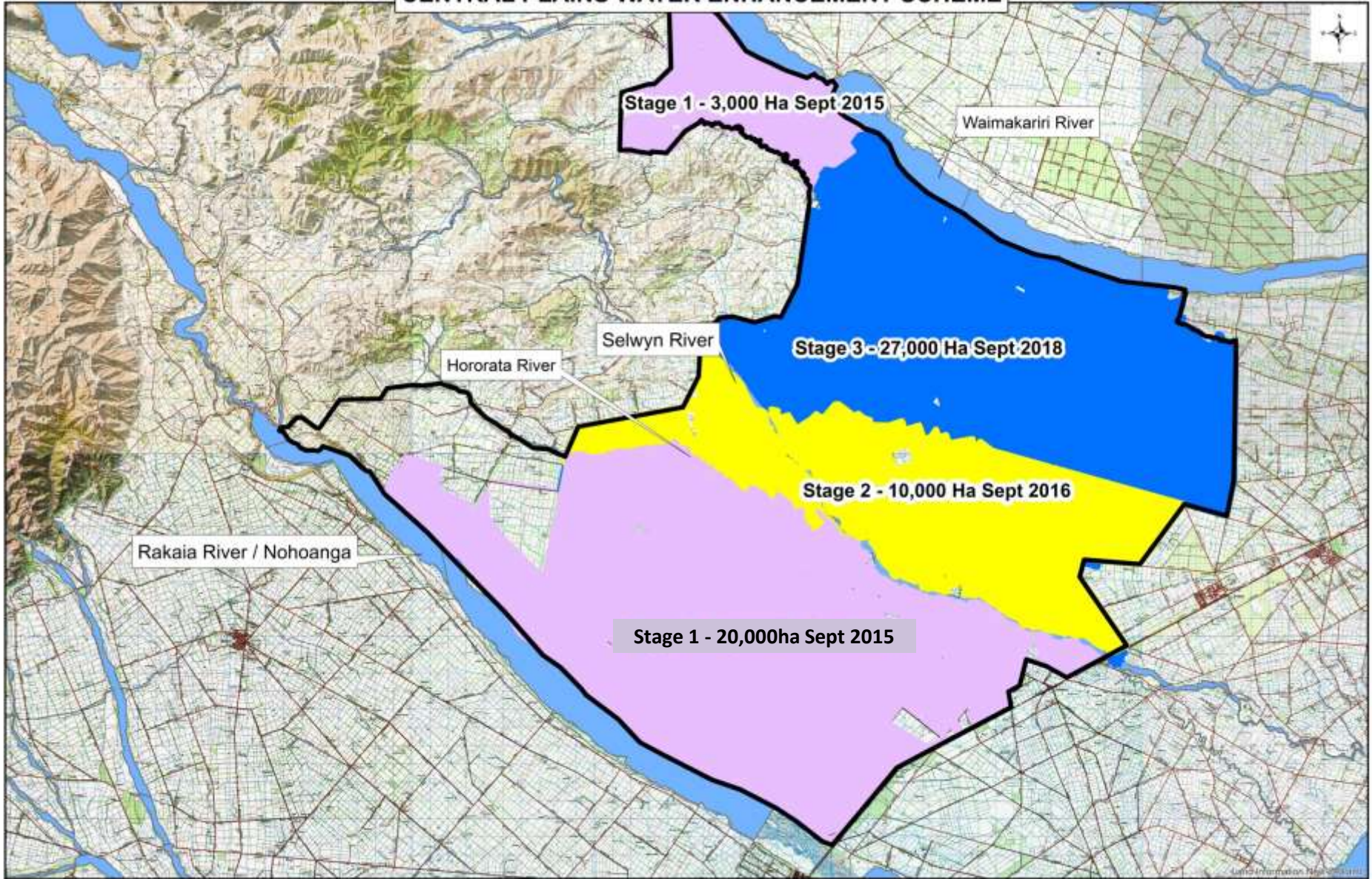
Compliance

CPWL Compliance Committee to deal with breaches of water use compliance.

Compliance

FMP performance will be audited by an independent assessor (annually for first 2 years then once every 3 years).

CENTRAL PLAINS WATER ENHANCEMENT SCHEME



CENTRAL PLAINS WATER ENHANCEMENT SCHEME



Scale:	1:125,000
Compiled:	RAC
Approved:	XXX
Projection:	NZTM
Date:	27/08/2013
Revision:	XXX

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Summary

- CPW are in the process of implementing a suite of consent obligations that require regular measurement and assessment of the scheme and farmer/irrigator performance in order to monitor the effects of the scheme on the environment.
- On farm impacts will be captured within the Farm Environmental Plan
- Scheme wide impacts will be captured within the Scheme Environmental Management Plan (Sustainability Protocol requirement), ground and surface water quality and level/flows monitoring.
- The Community Liaison Group will review the annual Farm Environmental Management scheme report, and the scheme infrastructure performance (including annual site walk of scheme infrastructure);
- The Environmental Enhancement Fund Committee will review suitable projects for biodiversity enhancement.
- **Measure to Manage reflects the underlying philosophy of CPW sustainability protocol and consents.**