



Central Plains Water Ltd



Annual Compliance Report
2015/2016 Irrigation Season

Certified by:

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1.0 Introduction

The purpose of this report is to illustrate compliance with Condition 18 of Central Plains Water Trust's (CPWT) resource consent for the discharge of nitrogen to land (CRC165686). Condition 18 concerns the land area that Central Plains Water (CPWL) supplies water to, the volume of water supplied to each property and the land use of each property. To ensure the information we provide is comprehensive we have extended the scope of this report to cover compliance matters relating to scheme operations that are required to be reported as per Schedule 2 of Water Permit CRC165680.

This report covers the first season of Stage 1 of the Central Plains Scheme area, which operated from 1st September 2015 until 11th May 2016.



Figure 1. ECan Officials Inspect the Intake Gallery and Fish Screen

2.0 Executive Summary

This report focuses on compliance during scheme operations. It is however important to note that the Scheme's consent compliance track record commenced prior to the operation of Stage 1. CPWL achieved 100% compliance with the Resource Consents during the Stage 1 construction phase. Environment Canterbury compliance staff have commented that this achievement is unprecedented in the region. This achievement is attributed to the high degree of environmental management and care provided by the contractors and the CPWL Team.

CPW Stage 1 includes a 17km fully lined headrace canal and 130km HDPE underground pipe distribution network. Whilst more expensive than the originally planned open channel distribution network, the piped system has resulted in a number of benefits including the ability to deliver pressurised water to farmers' gates, and little or no leakage/seepage from the network.

The inaugural Stage 1 irrigation season commenced on the 1st September 2015. To enable CPW to provide water, a 2-year record of ground and surface water quality and quantity data was required to be gathered by the Scheme. This condition was satisfied and the results of this ongoing monitoring will be reported separately in an annual compliance report due 30 August 2016.

Central Plains Water Limited (CPWL) was also required to ensure all scheme irrigators had a Schedule 7 approved Farm Environment Plan (FEP) prepared by a suitably qualified person prior to delivering water. Prior to 1 September 2015, the Scheme had 101 FEP's in place. No water was provided to farms that did not have an FEP in place.

Regardless of whether the Scheme irrigator uses groundwater or Scheme water (partially or fully, i.e. supplements their existing groundwater with scheme water), the non-CPW irrigated land (or dryland) part of their farm system can be included in the FEP managed by the Scheme. As such, the total land area managed in Stage 1 under CPW's compliance umbrella is 26,477Ha, which is greater than the area supplied Scheme water (based on Nutrient Budgets) of 23,098Ha. Of that area 16,684Ha was existing irrigation that, to varying extents, has converted to Scheme water. 6,413Ha of dryland has been converted to CPW. This was made possible by CPW's nitrogen discharge allocation granted via consent CRC165686 granted in February 2016 (and is reflective of the allocation included for the Scheme in Plan Change 1 LWRP).

The existing irrigated land was and continues to be predominantly dairy/dairy support, with the new irrigation including a mix of dairy, arable mixed farm systems with dairy/beef, and in some cases sheep grazing.

In terms of rainfall, 2015-16 was another dry season for Farmers. CPW successfully delivered over 90 Million cubic metres (90Mm³) of low nutrient, alpine water to the Stage 1 area of the Scheme. Farmers who had contracted sufficient stored water had full "on demand" reliability of supply for the whole season.

Of the farms managed under the CPW Scheme consents, 54 properties hold groundwater consents. The combined annual volume of these consents is 97Mm³.

For the 2015-16 season, these groundwater abstractors used only 21Mm³ of the 97Mm³ annual volume allocated to their consents.

Thirty-five bores (out of 154) previously used for irrigation were not used for irrigation this season, effectively reducing the amount of groundwater able to be abstracted by a volume of 19Mm³. At least

78.6% of the consented groundwater annual volume held by CPW irrigators was not used during the irrigation season (noting that typically the full annual volume is not used).

On average a total of 4,210m³ of CPWL water was used per ha, with a scheme wide average (Stage 1) application rate of 2.81mm/day based on a 150-day irrigation season. This is less than (nearly half) CPW's authorised application rate limit of 5.18mm/day.

Stage 1 FEP audits commence in August 2016 and are expected to be completed before 1 January 2017. The results of these audits will indicate further training opportunities for irrigators to assist with the continual improvements required in order to achieve reductions in nitrogen discharge.

CPWL has established a number of groups and committees over the past two years, as required by the consents. The Community Liaison Group is now well established, and the Ground and Surface Water Expert Review Panel functioned very efficiently to ensure that the water quality and quantity baseline conditions, and compliance framework were well documented and completed to Environment Canterbury's satisfaction prior to the start of the irrigation season. The Environment Management Fund Committee has also been established to administer the Environment Management Fund. CPWL shareholders contribute toward this fund with commencement of irrigation with CPWL water.

The Environmental Management Fund and the Te Waihora Environmental Management Fund have been established. Funding proposals will be accepted from September 2016 for the first tranche of funding which will equate to ~\$50,000. CPWL looks forward to being involved with future projects that will provide real benefit to the environment.

3.0 Background

Central Plains Water Trust (CPWT) is a public charitable trust established in May 2000. The Selwyn District and Christchurch City Councils were the Settlers of the Trust. CPWT is the consent holder that holds and administers the consents. Central Plains Water Limited (CPWL) was established in mid-2003. CPWL is a cooperative of 380 shareholders with a Board of eight Directors. CPWL was established to raise funds, and to obtain and implement consents on behalf of CPWT. In 2012 resource consents were granted for CPWT to take water from the Waimakariri and Rakaia Rivers to irrigate approximately 60,000ha of Canterbury farmland. CPWL originally intended to deliver run of river water from both the Waimakariri and Rakaia rivers via a 56km headrace canal and ~400km of open channel reticulation system to the areas indicated on **Figure 2. CPWL Scheme Development Stages**

Plans have altered considerably from the concept designs developed for the original consent applications process. Farms within the Stage 1 & 2 area will be supplied from the Rakaia River via a 17km headrace from the Rakaia River intake (**Figure 3. CPWL Headrace Structures**) that stretches as far as Leeches Road. Stage 2 will be a fully piped network requiring no extension of the headrace. Water will be distributed across both the Stage 1 and 2 areas, predominantly under gravity, ~400km underground pipe network. A smaller scheme will be developed in the Sheffield area to deliver water to up to 4,000ha. The Sheffield Scheme area is physically disconnected from Stages 1 and 2 of the scheme. Sheffield Irrigation Scheme will utilise water from the Kowai and Waimakariri Rivers.

CPWL withdrew the applications for a large water storage dam in the Waianiwi valley during the consent hearing process, and have subsequently entered into an Agreement with Trustpower to secure 150Mm³ of Lake Coleridge stored water. This stored water increases the reliability of the Stages 1 and 2 from 63% using solely run of river water to 98%. The Sheffield Schemes' reliability will be provided via a 2Mm³ storage reservoir as it is cost prohibitive to pump TrustPower Stored Water up gradient to service the Sheffield area.

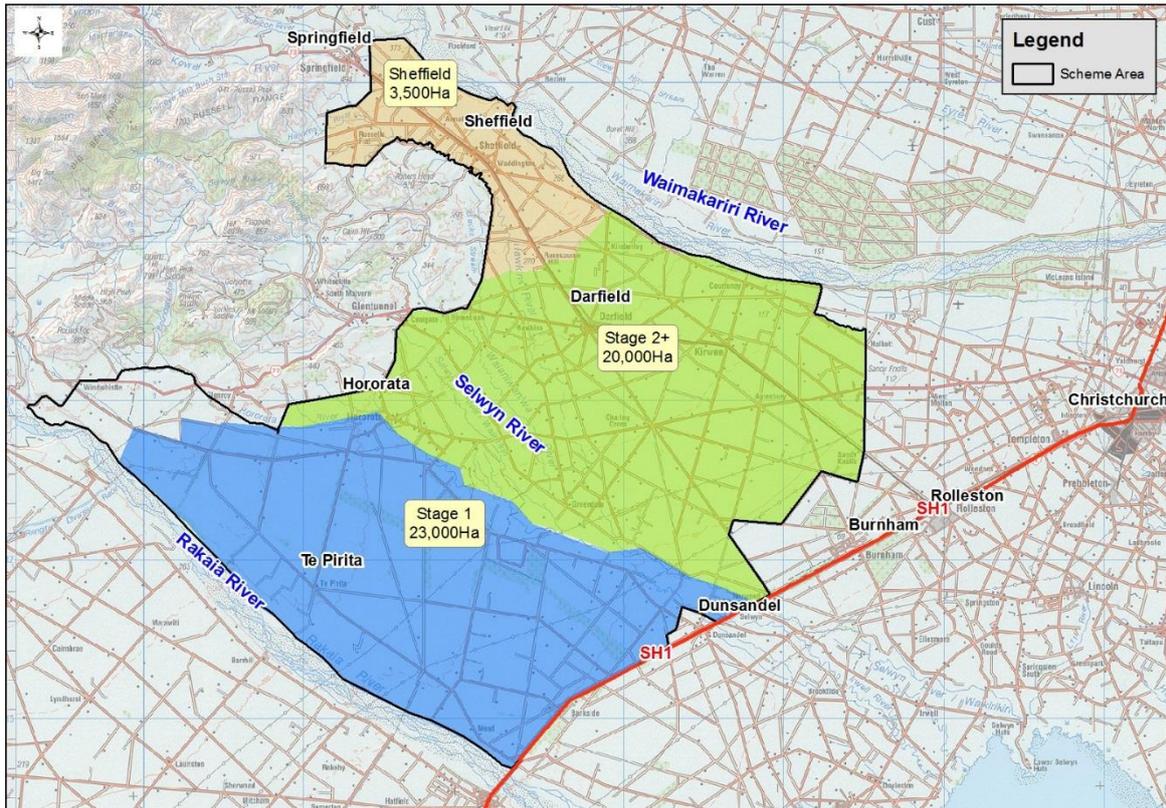


Figure 2. CPWL Scheme Development Stages

Stage 1

In constructing Stage 1, CPWL has delivered a \$180M greenfield irrigation project that is a first of its kind, both technically and commercially, in New Zealand. Only 15 months after work commenced, the 17km-long Stage 1 canal was filled with water. In one of New Zealand’s biggest earthmoving projects in recent years, over 3.3 million cubic metres of material was moved and 560,000m² of HDPE liner and 815,000m² of geotextile was laid. Thirteen bridges spanning up to 28m (ten on-farm bridges and three public road bridges) and 4 offtake structures were built.

Stage 1 of the Central Plains Water Scheme irrigates approximately 23,500 hectares of farmland in the Canterbury Plains in an area bordered by the Rakaia, Hororata and Selwyn Rivers and SH1. The Stage 1 Distribution Network comprises four pipelines, five mainline Pressure Relief Valves, 10 Pump Stations and 113 farm turnouts, which provide water to 120 properties.



Figure 3. CPWL Headrace Structures

The Rakaia River intake is located approximately 8km downstream of the Rakaia Gorge Bridge. It intercepts the stable river braid in this location. Water is diverted from the braid and conveyed to the Intake Gates, Sedimentation Pond and Fish Screen before entering the main Headrace (**Figure 3**). The intake structures and fish screens have been scaled appropriately so that they can be increased in size for future scheme stages.

Stage 2

During the early part of 2016 CPWL tendered the construction of Stage 2, and toward the end of Q2 raised farmer funding via a PDS to construct Stage 2 to deliver irrigation water to 20,000ha. CPWL are now working toward a programme of commencing construction in December 2016 with a target operational date of 1 September 2018.

Stage 2 of the Scheme will provide tangible environmental benefits by replacing current ground water abstraction with river water, which is expected to enhance the flows of lowland streams that feed Te Waihora. CPWL, with the implementation of Farm Environmental Plans for all shareholder irrigator farms, will positively influence farm practices in Canterbury (Good Management Practice by 2017, and Improved GMP by 2022). These are key outcomes sought by the Selwyn Waihora Zone Committee, and are imbedded in Plan Change 1 to the LWRP.

CPWL are also working with Environment Canterbury to establish the feasibility of enhancing lowland stream flows and water quality by discharging clean river water into those streams (Targeted Stream Augmentation). In addition to the anticipated environmental benefits of the Scheme, there are also further positive Economic, Social and Cultural impacts expected including:

- Annual direct and indirect regional agricultural output expected to increase by \$592m per annum;
- The wider economic impact is assessed at approx. \$1b to \$1.4b per annum;
- Changes to community – additional jobs (~1130) for farm workers, farm service providers, contractors, rural service providers, small business, increase in school roles & recreation;
- 250 construction workers spending locally;
- \$900M construction value, Scheme plus on farm infrastructure;
- Recognition of local iwi and hapu policies for fresh water by controlling stock access to waterways/wetlands, and farm levied Te Waihora Enhancement Fund.

4.0 Overview and Update of Scheme Consents

4.1 Water Use Consent CRC165680

CRC165680 (*the Use Consent*) replaces an earlier consent CRC061973 (*the Original Use Consent*). This is the CPWL Scheme’s ‘umbrella’ water permit to use water and applies to the Command Area shown in **Figure 4**.

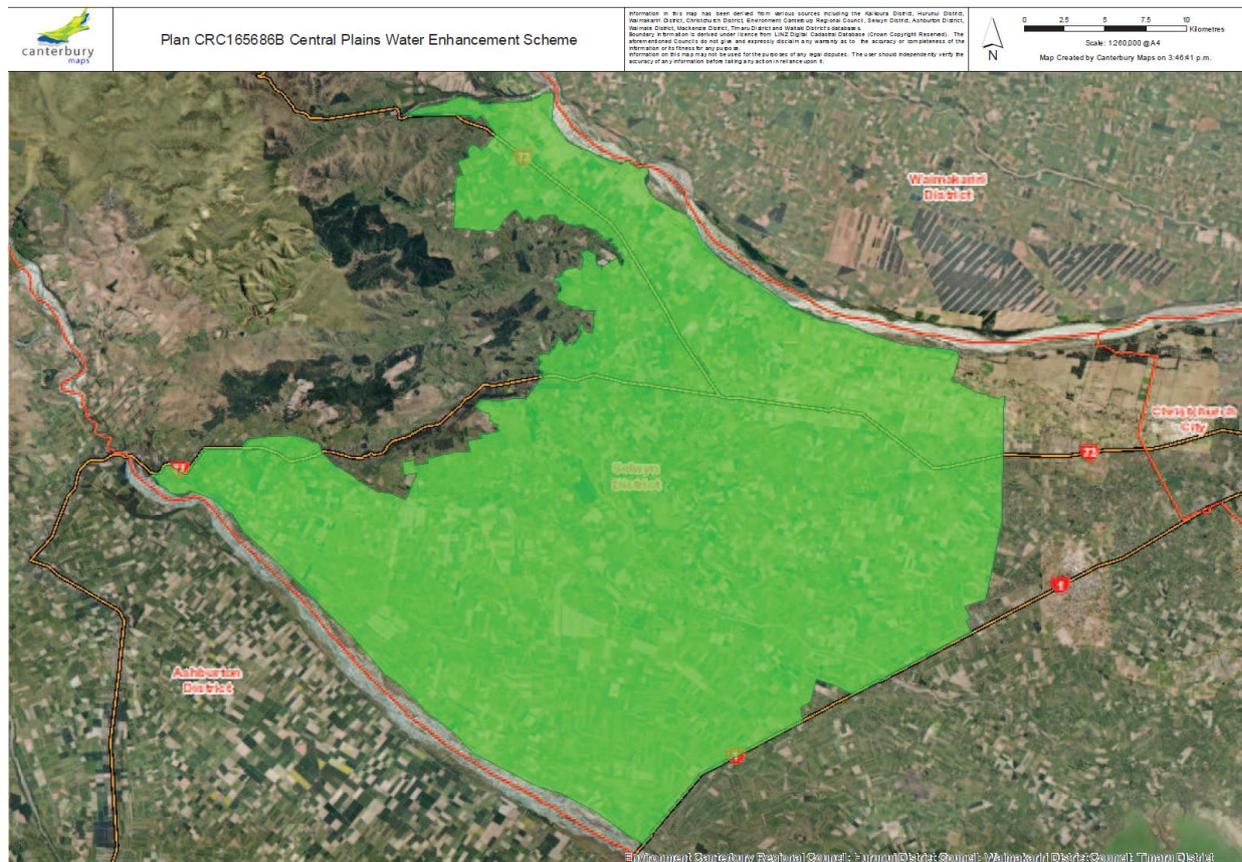


Figure 4. Plan CRC165680B Scheme Command Area

Water used under CRC165680 cannot be used by a farmer unless they provide CPWL with a written undertaking, via the Scheme's Water Use Agreement, that they will comply with the conditions of the Use Consent, and those of CRC165686 (the Discharge Consent, see section 4.2 below). The Use Consent sets a scheme-wide maximum water application rate and a combined annual volume for the concurrent use of ground and surface water, along with a suite of use and monitoring obligations.

The Original Use Consent contained requirements for farm management plans, and specified auditing and reporting requirements for those plans. The current Use Consent contains parallel concepts and requirements, but the actual content of Farm Environment Plans (FEPs) and reporting has been shifted into the Discharge Consent (discussed below).

This leaves the Use Consent with more high-level requirements including, among others, that:

- (I) farmers will be required to take all practical steps to avoid irrigating beyond field capacity; and
- (II) water supplied under the consent shall not exceed the prescribed combined volume and application rates.

Importantly, however, the Use Consent also stops Central Plains from supplying water to:

- (III) *“any farm or group of farms”* where that farm or farms are causing *“significant adverse localised effects”* resulting in, for example, breaches of standards in the relevant planning framework; and
- (IV) farms that have, on a specified audit methodology, received two consecutive C or D FEP audit grades (although there is a limited exception to failures over effluent management objectives before 1 July 2019).

The Use Consent therefore places important high level constraints on the CPWL Scheme's use of water. It effectively ensures that a farmer's ability to be supplied by Central Plains is wholly dependent on preparing, producing, maintaining and implementing an FEP, and on operating in a manner that will avoid causing any (significant) localised adverse effects.

4.2 Discharge Consent CRC165686

CRC165686 (*the Discharge Consent*) has been the CPWL Scheme's 'umbrella' nutrient discharge consent since 6 April 2016. It applies to the area shown in **Figure 5**, and expires on 25 July 2047. It is CPWT's first discharge consent.

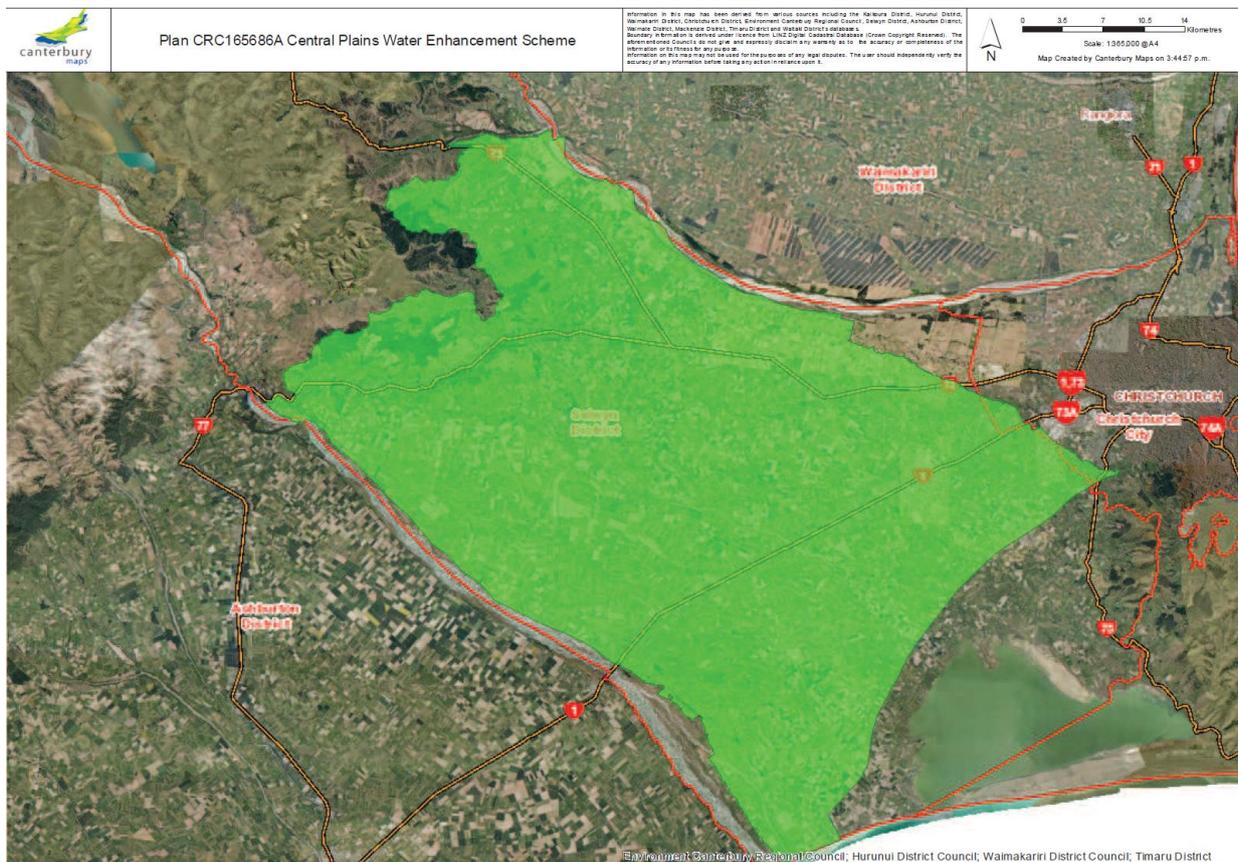


Figure 5. CRC165686A Nutrient Management Area

As evident from a comparison of **Figure 4** and **Figure 5**, the Discharge Consent covers a greater area than the Use Consent. This enables farmers using CPWL irrigation but who also own properties outside the irrigation Scheme Command Area to have their FEPs, nutrient budgets, auditing and related compliance reporting included under the Discharge Consent (and managed by CPWL). In simple terms, this is a compliance reporting function only - the idea being to assist those farmers to make compliance and reporting easier. There is no ability for the CPWL Scheme to increase its overall nutrient loss by making nitrogen available to farms outside of the CPWL Command Area.

The Discharge Consent has three key functions, including to set:

- Nutrient Discharge Allowances (*NDAs*) for individual properties covered by FEPs, and reduction targets for those *NDAs*;
- the requirements for Central Plains FEPs; and
- the requirements for a scheme-wide Environmental Management Strategy (*EMS*), along with other reporting obligations.

Central Plains has also developed a nutrient allocation strategy.

4.3 Nutrient Discharge Allowances

Under the Discharge Consent, each property is assigned a Nutrient Discharge Allowance (NDA) calculated in accordance with a methodology set out in the consent.

The methodology establishes rules for calculating the NDA for land that was previously unirrigated, but will be irrigated under the Use Consent. The data inputs to that process are vetted by Environment Canterbury (ECan) to ensure their robustness. The basic object of these conditions is that even with increasing areas of irrigation, the CPWL Scheme will not discharge more than the 979 Tonnes per annum allocated for new irrigation in Table 11(j) of the Land and Water Regional Plan (LWRP) (or an equivalent allocation calculated using a later version of OVERSEER®). These conditions also ensure that, even in the presence of other Farm Enterprise Groups (FEGs) 'within the CPWL Scheme boundary', the 979 Tonne total new nitrogen load cannot be exceeded.

Finally, the Discharge Consent requires specific allowance reductions in nitrogen loss. From 1 January 2017, properties are required to reach improved Good Management Practice (defined in Plan Change 5 as 'Good Management Practice Loss Rate'), and percentage reductions contained in the LWRP after 1 January 2022. The post-2022 reductions are as follows:

30% for dairy;

22% for dairy support;

20 for pigs;

5% for irrigated sheep, beef or deer;

2% for dryland sheep and beef;

7% for arable;

5% for fruit, viticulture or vegetables; and

0% for other land uses. The requirements of FEPs, discussed below, will ensure that the nutrient loss reductions occur.

4.4 The Requirements for Central Plains FEPs

The Discharge Consent prescribes comprehensive requirements for the CPWL FEPs. All FEPs, and the implementation of those FEP, must be audited by a suitably qualified professional. Properties must not receive three or more C or D grades in a rolling five-year period, and will not be able to receive water from CPWL in the event of two consecutive C or D grades.

In addition to the requirement for individual farm FEPs, the Discharge Consent requires Central Plains to prepare and submit to ECan an Environmental Management Strategy (EMS) by 1 September 2016. CPWLs EMS has been developed from, and essentially replaces the Sustainability Protocol required in the Original Use Consent. The Sustainability Protocol established the protocols, policies and procedures that CPWL will follow in the development, operation and maintenance of the Scheme to ensure both the scheme operators and water users can achieve high environmental standards and sustainable outcomes.

CPWL are currently have amended the Sustainability Protocol to bring it into alignment with Discharge Consent requirement for the EMS. There are very few changes required, and the key amendments relate to avoiding duplication between the EMS and the Use and Discharge Consents.

The EMS will be submitted to ECan for approval in August 2016 to ensure the 1 September 2016 compliance date is met.

The EMS requires Central Plains to record:

- how it will account for nutrient losses across its farms;
- how it will manage the required FEP audit process;
- the methods it will use to ensure that all farms will meet an FEP audit grade of at least B; and
- the methods it will use to assist farmers to meet the reduced NDA targets.

The EMS will therefore perform a similar management function to the FEP but at a scheme-wide level and with content focussed on scheme-wide issues. The conditions requiring the direct reporting of the EMS were designed to give ECan high levels of visibility over the nutrient situation within the CPWL Scheme.

4.5 Nutrient Allocation Strategy

As outlined in section 4.3, the Discharge Consent provides for reductions of scheme-wide nutrient losses, with reduction targets for 2017, 2022 and 2037. CPWL can re-assign the NDA amongst properties irrigated under the Use Consent at any time, provided that both the calculation requirements and reduction targets are complied with. This reflects the core of the CPWL Nutrient Allocation Strategy (NAS). Under the final strategy (which has been developed in consultation with ECan) Central Plains has set out the following key approaches:

- CPWL NDA is retained by CPWT as a Scheme asset;
- CPWL will sublicense the NDA to “new” irrigators based on an assessment of the difference between their un-irrigated 2009-2013 nitrogen baseline and the nitrogen loss demand for their proposed operation if operated at GMP;
- a nitrogen sublicense is available to new irrigators for so long as they remain within the CPWL Scheme. In addition, if a shareholder is part of a non-CPWL FEG, the sublicense will only be available for the relevant property and cannot be redistributed across the land within the FEG (i.e. CPWL nitrogen allocations cannot be transferred outside the Scheme); and
- allocations have occurred/will occur *pro rata* to each stage of the Scheme. If the nitrogen apportionment for any stage is exceeded, Central Plains may reduce the additional nitrogen allocation sublicensed to shareholders within that stage on a *pro rata* basis (i.e. uniformly).

Overall CPWL consider that the strategy enables:

- an ability to address equity issues in allocating nitrogen between current and future shareholder farms across the different stages of the Scheme; and
- incentivised good behaviour by both the Scheme and farmers, because both parties are aware that non-compliance by individual farmers could cost everybody in the long run.

So in simple terms, while ‘where we allocate our nitrogen’ is our choice under our resource consents, it is a choice bounded by consent conditions and by our own approach to farm enterprises.

4.6 Water Use Agreement

Water used under the Use Consent cannot be used by a farmer unless they provide CPWL with a written undertaking, via the Scheme’s Water Use Agreement, that they will comply with the conditions of the Use and Discharge Consents.

CPWL has the ability to turn off water supply to any farmer should any non-compliance not be remedied within the timeframes required by CPWL.

CPWL received a signed Water Use Agreement from each Stage 1 irrigator prior to supplying them with water for the 2015-16 irrigation season.

4.7 Ground and Surface Water Monitoring

In addition to the specific farm related compliance tools, at a scheme level, CPWL are required to ensure water quality and water quantity within and below the command area are not adversely affected by the operating scheme.

To oversee and direct the ground and surface water monitoring programme undertaken by CPWL, an independent committee is required under the Use Consent. The Ground and Surface Water Expert Review Panel (GSWERP) was established in 2012 with representatives from CCC, SDC, ECan and Ngai Tahu in addition to a number other experts. CPWL has met with GSWERP over the past 3 years as the baseline reports for water quality and water levels were prepared. GSWERP have been instrumental in agreeing a process of review and enquiry relating to exceedence of any established water quality and quantity trigger level. CPWL is required to prepare an annual compliance report for GSWERP review and approval, prior to submitting to ECan by the 1st September each year. As such, the results of the monitoring and subsequent report are not replicated in this Compliance Report.

4.8 Groups and Committees

4.8.1 Community Liaison Group

In accordance with Schedule 2 of the Use Consent, the Community Liaison Group (CLG) was established in February 2014. The CLG members work closely with a variety of stakeholders within the local communities. The Group are invited to meet every six months to discuss any community concerns relating to the Scheme, and to review and recommend projects for the Environmental Management Fund. Collectively, the members of the group have experience and knowledge in the following areas:

- Ngai Tahu cultural values;
- Management of indigenous biodiversity;
- Recreational uses of the Waimakariri River or Rakaia River;
- Sustainable irrigated agricultural practices;
- Water quality and sustainable land management;
- Community and/or business in Central Canterbury;
- Lowland Drainage network operation.

Membership for the CLG was offered through an open public process in late 2013. The current members of the group are Dr. Olive Webb, Warren Galletly and Guy Trafford.

The CLG Terms of Reference can be found in Appendix 8.2.

4.8.2 Ground and Surface Water Expert Review Panel

In 2013, Central Plains Water Limited (CPWL) established the Ground and Surface Water Expert Review Panel (GSWERP). GSWERP is an independent panel of experts with knowledge and skills relating to ground- and surface- water quality and quantity, land drainage, and cultural sensitivities.

The Panel is chaired by John Sunckell. John Bright, Ned Norton, Matthew Smith and Peter Callander have been Panel members since its inception, while Runanga representative Kyle Nelson has been a Panel member since May 2015, when he replaced Lisa Smith. The Panel includes members who represent the interests of the Christchurch City, and Selwyn District Councils, Ngai Tahu and Environment Canterbury.

4.8.3 Ground and Surface Water Monitoring Programme

Part I of the Ground and Surface Water Plan was approved by GSWERP and submitted to ECAN on 4 February 2014, and Part II was approved by ECAN on 31 July 2015.

Results from the Ground and Surface Water Monitoring Programme are required to be submitted to GSWERP and Environment Canterbury by 1 September 2016.

4.8.4 Funds

Part of the mitigation package offered by the Scheme involves the establishment an Environmental Management Fund and a Te Waihora Environmental Management Fund.

Consent conditions require a levy of \$0.40 per ordinary share per annum to be paid into the Environment Management Fund, and a further \$0.40 per ordinary share per annum to be paid into the Te Waihora Environmental Management Fund.

The calculation basis for the levy was subsequently amended to 40c per 2 ordinary shares by agreement with the Councils in response to the number of shares doubling in 2010 to raise further shareholder equity to fund the ongoing consenting costs.

4.8.4.1 Te Waihora Environmental Management Fund (TWEMF)

The TWEMF was established during the 2015-16 irrigation season. At 30 June 2016 the TWEMF had a value of \$39,670. Due to the staged nature of the Central Plains irrigation scheme's development, annual contributions to the fund will increase as the area under irrigation increases. This fund is provided directly to Ngai Tahu who manage allocation and annual reporting of fund expenditure. CPWL are liaising with TRoNT to confirm the distribution of this fund and expect to have a confirmed fund manager by the end of August 2016.

4.8.4.2 Environmental Management Fund

The EMF was established during the 2015-16 irrigation season. Consent conditions required the EMF to hold a minimum of \$300,000 by the time 10,000 Ha of land is irrigated by the scheme. At the initial levy rates and due to the staged development of the Scheme it would have taken four irrigation seasons for the fund to reach \$300,000. In order to ensure compliance with the consent, CPWL provided a loan to the EMF of \$300,000. The loan will be repaid via the annual levy received from irrigating Shareholders. The fund is available for allocation based on the area irrigated per season. Once the loan is repaid the levied funds will accrue in the EMF at the same rate as the TWEMF.

An independent Environmental Management Fund Committee (EMFC) is responsible for managing, and allocating distributions from the EMF. The Committee comprises John Sunckell, Dr. Olive Webb

and Jon Harding and has up to 2 positions awaiting nomination from TRoNT. The EMFC has confirmed they will receive applications for EMF from September 2016 for the 2015/16 irrigation season levy.

Two committee meetings have been held to date. Appendix 8.3 contains the (DRAFT) TOR that was developed for the EMFC members. Draft EMF Proposal Guidelines and Proposal Forms for expenditure have been approved by the EMFC.

5.0 Consent Compliance

5.1 Construction Stage Compliance Record

This report focuses on compliance during scheme operations. It is however important to note that the Scheme's consent compliance track record commenced prior to the construction of Stage 1. We are pleased to highlight that CPWL achieved 100% compliance with the Resource Consents during the construction phase. Environment Canterbury compliance staff have commented that this achievement is unprecedented in the region. This achievement is attributed to the high degree of environmental management and care provided by the contractors and the CPWL Team to ensure that the adverse effects of the project during construction are minimised and meeting all the requirements of the approved/certified environmental management plans.

5.2 Stage 1 Operating Compliance

5.2.1 Farm Environmental Plans (FEP's)

A FEP is the key environmental management tool that helps farmers recognise on-farm environmental risks and sets out a programme to manage those risks. FEPs are unique to a property and reflect the type of farm operation, the local climate and soil type, and the goals of the land user.

The Farm Environment Plan covers management areas such as:

- Irrigation Management – efficient water use
- Nutrient Management
- Soil Management
- Environmental Hotspots Management (Offal, rubbish & silage pits)
- Collected Animal Effluent Management
- Livestock, Waterways & Riparian Management
- Biodiversity and Ecosystem Management

CPWL irrigators were required to have a FEP in place before they were able to take water from the Scheme.

5.2.1.1 FEP Roll Out and Implementation Process

CPWL embarked on a process to educate/inform shareholders of what they were required to do to ensure they could use scheme water. This process was rolled out initially via a series of workshops in March 2015. CPWL staff then carried out one-on-one meetings with farmers to;

- ensure they all had been adequately informed on what is required for their FEPs
- provide a series of maps (consents, soil type, water ways, significant sites etc.) that could be included in FEPs,
- collect information to pre-populate the FEP templates that their respective Farm consultants would use in preparation of the FEPs.

CPWL irrigators were required to have a FEP in place before they were able to take water from the Scheme (i.e. prior to Stage 1's first irrigation season commencing 1 September 2015).

CPWL was instrumental in collaborating with the primary sector group to share information and drive a process that resulted in ECAN requiring one FEP per farm instead of one to meet CPWLs consent requirements and one to meet the farmers' respective industry group requirements. CPWL accepts industry FEPs so long as they are Schedule 7 (of the Land and Water Regional Plan) approved.

5.2.1.2 Stage 1 FEP Compliance Status

By the formal commencement of the first irrigation season for Stage 1, a total of 101 FEPs were in place and four remained outstanding. Irrigation Turnouts on farms without an FEP in place were not switched on, to ensure that no water could be taken. By the end of the season only two FEPs were outstanding and these were from dryland farms that had not finished implementing their on-farm irrigation infrastructure.

The land area of 26,477 effective hectares is covered by the 105 farms under CPWL's compliance umbrella (FEP's). CPWL supplies scheme water to 23,128ha's, the balance being non CPWL irrigated land that is 'bolted on' to Scheme FEP's and dryland.

5.2.1.3 Nutrient Budgets and Nitrogen Allocation

While FEP's were completed prior to the start of the irrigation season, nutrient budgets were not. CPWL has been working with our Stage 1 farmers to ensure nutrient budgets are approved and the respective Nitrogen allocations can be made prior to the start of the 2016-17 irrigation season. As part of this process, CPWL is gathering information relating to those farms, or parts of farms, that are dryland and are eligible for an allocation of Nitrogen from the Scheme. The total area eligible for a nitrogen allocation is currently 6,781ha. CPWL modelled dryland for Stage 1 equates to 7,000ha therefore a surplus of 219ha of dryland eligible for allocation remains. There is some dryland in Stage 1 that could therefore be supplied with water from the scheme in the future.

5.3 Land Use

In the Stage 1 area a total of 23,565Ha (based on Nutrient Budgets) was irrigated using CPWL water (includes irrigation systems that use Groundwater and CPWL water) during the 2015-16 season. There is 6,781Ha of newly irrigated land,16,784 of existing irrigated land (land now irrigated by CPWL and Groundwater/Other) and 906Ha of existing irrigated land (Groundwater only). This is illustrated in **Table 1. Land Use.**

Stage 1	Ha's
100% existing irrigation (includes CPWL and GW).	16,784
100% existing irrigation (GW only)	906
New irrigation (ex-dryland)	6,781
Total irrigated area managed by CPWL (based on Nutrient Budgets)	24,471
Total effective Ha's covered by CPWL FEP's	26,647
Total Ha's covered by CPWL FEP's	30,246

Table 1. Land Use

Prior to commencement of the CPWL Irrigation scheme, the majority of the Stage 1 area was already irrigated with groundwater (Figure 6), primarily for dairy, but also including dairy support with some arable, and beef and sheep mixed farm systems. There is a greater proportion of Corporate and other large scale farming operations in Stage 1 compared to that anticipated in Stage 2.

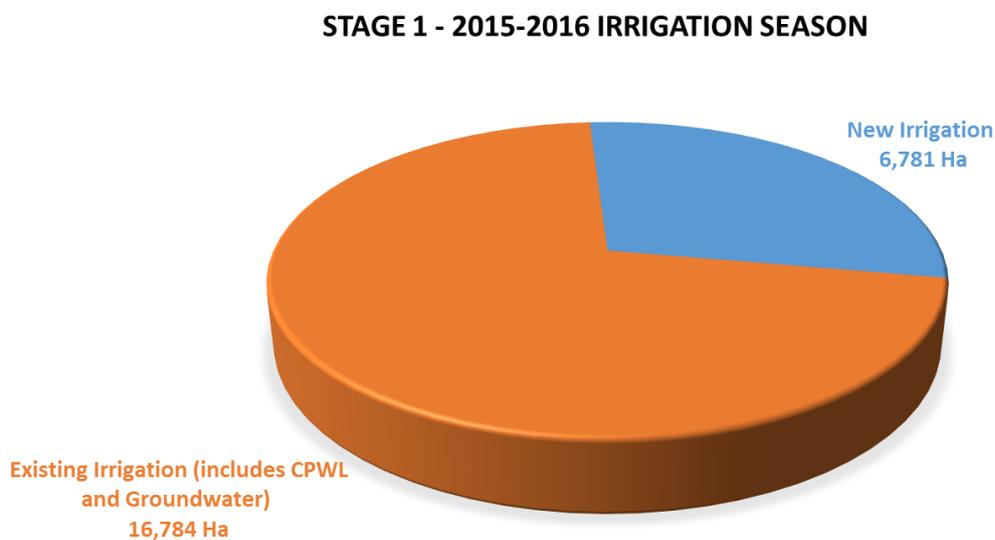


Figure 6. Stage 1 New and Existing Irrigation

The eight main land uses in the Stage 1 area are shown in Figure 7 below.

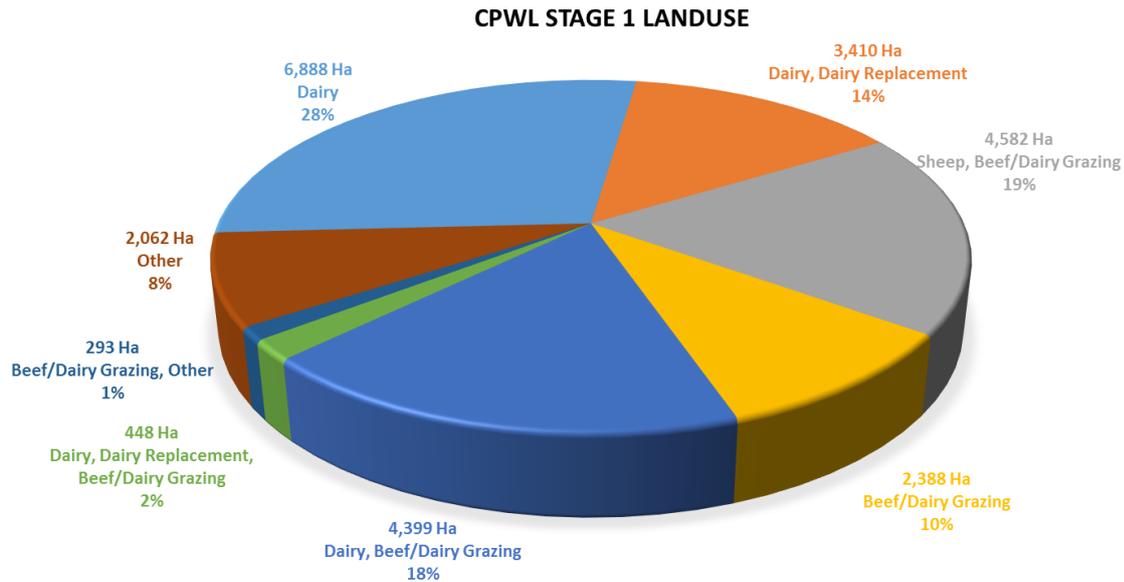


Figure 7. Stage 1 Land Use

Land use categories represented in **Figure 7** are based on the categories defined in OVERSEER. Previous land use analysis established by CPWL has differed from this classification. It can be difficult to categorise mixed farm systems. Arable is not represented in this breakdown as a separate category; rather, it is included in Sheep, Beef/Dairy Grazing (18%).

The largest single land use in the Stage 1 area is Dairy at 6,888Ha. Dairy farming along with grazing of dairy replacements accounts for 3,410Ha. 8% of the Stage 1 area is used for farming activities that generally include combinations of at least three of the farming systems shown in **Figure 7** and also encompasses any system that includes a deer or pig farming operation.

CPWL undertook a study of 40 farms across the Scheme area in 2014. 20 farms were existing dryland and 20 were irrigated via groundwater. From a land use perspective, the key finding was that there are generally two farm systems within the Scheme: Dairy, and a mixed system with the variation being the type of mix and the percentage of each mix. New irrigators in Stage 1 who have not converted to dairy maintain that a mixed farm system enables them to farm to market demand without the higher capital investment required to set up a dairy system. CPWL has received feedback from Stage 2 farmers that the arable based mixed system is also preferred.

5.3.1 Irrigation Area and Types

In accordance with Condition 2 of the Use Consent, use of Scheme water is limited to the 60,000ha Scheme Area. As the Scheme has been developed in stages, the use of water covered by condition 2 relates only to Stage 1, water supply area of 23,565ha [noting again that the effective FEP area covers a total of 26,647ha]. The irrigation area shown in **Figure 8** below illustrates the extent of irrigated area, and provides a breakdown of irrigation type. Note that this plan also includes shareholder properties that have consented groundwater bores, and are using these to varying extents, the details of which are reported in section 5.2.4 Water Use.

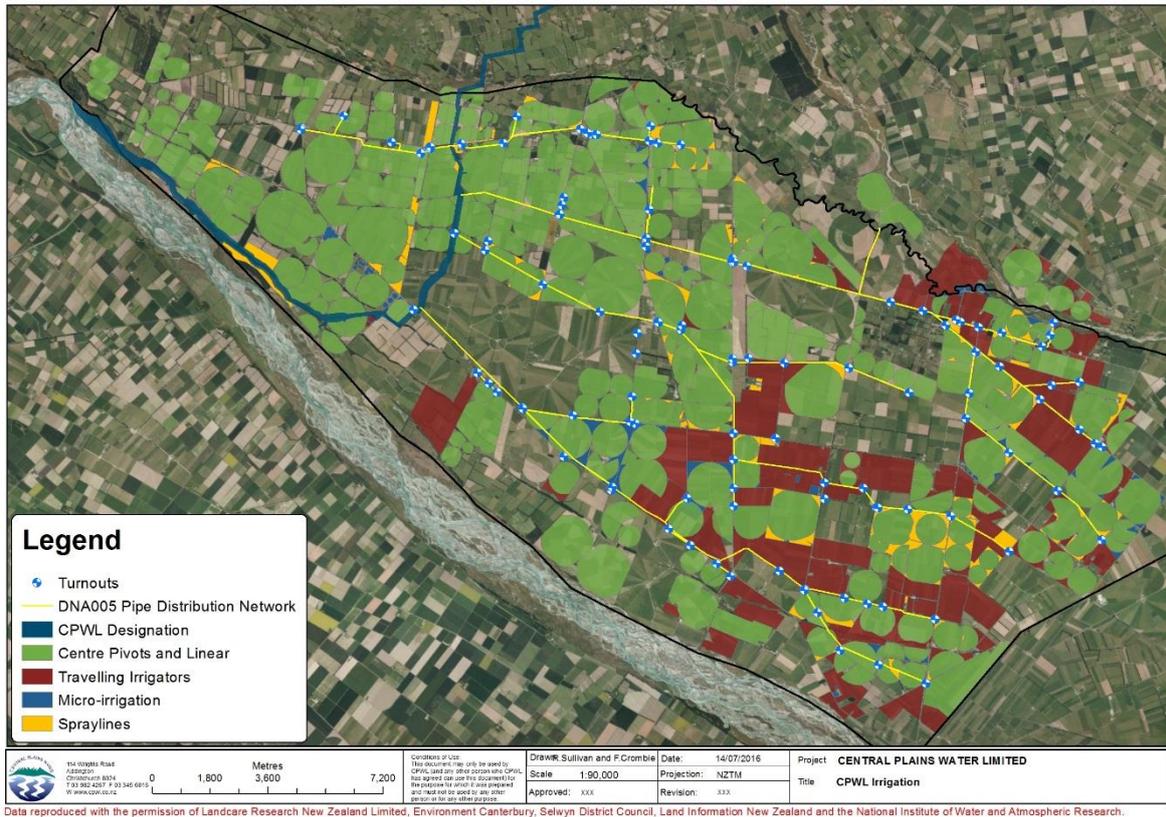


Figure 8. Irrigation Area of CPWL Water Users as per the FEP's

Note, the irrigated area shown in **Figure 8** includes some areas that only receive groundwater. The breakdown of irrigation system type within Stage 1 is shown in **Figure 9** below, which shows the majority of irrigators to be centre pivots, and the majority of *new* irrigators are centre pivots. The extent of travelling irrigators, such as Roto-Rainers in the bottom half of the Stage 1 area, are predominantly existing irrigators and potentially reflects the earlier irrigator adopters in this area, noting that at the time, Roto-Rainers were the best system available and most efficient.

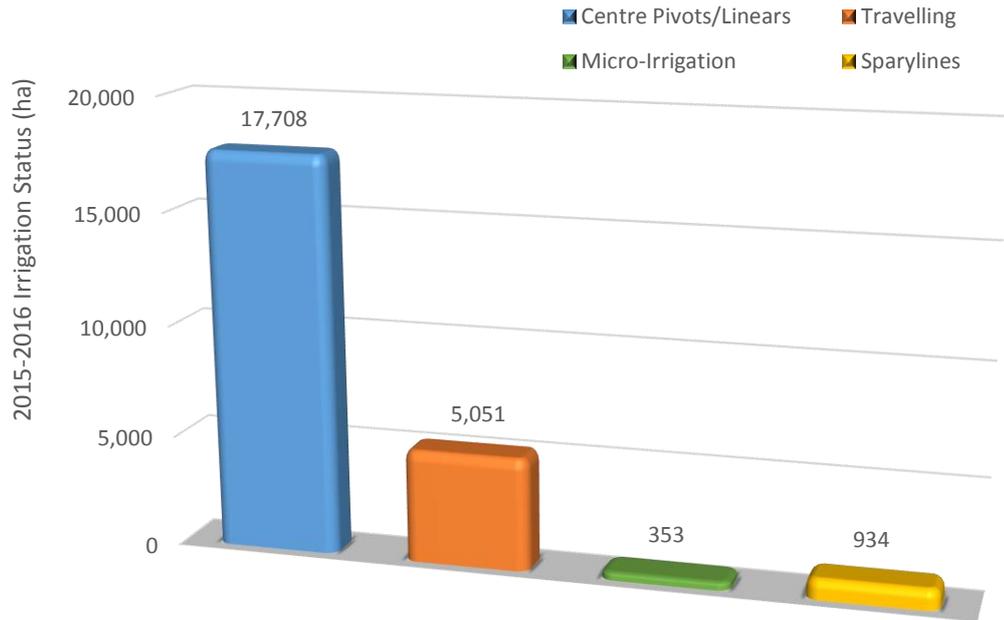


Figure 9. Breakdown of Type of Irrigator by Existing and New Irrigators

61% of Stage 1 farmers have soil moisture monitoring (SMM) tapes or probes (

Figure 10.) to assist with their decision making regarding when to irrigate their farms, 1% use a soil water budget and a further 1% use an irrigation scheduling calculator. 37% of farmers use some other form of decision making tool. CPWL are looking to offer training on what methods are currently available to farmers to assist with managing soil moisture levels on their farms.

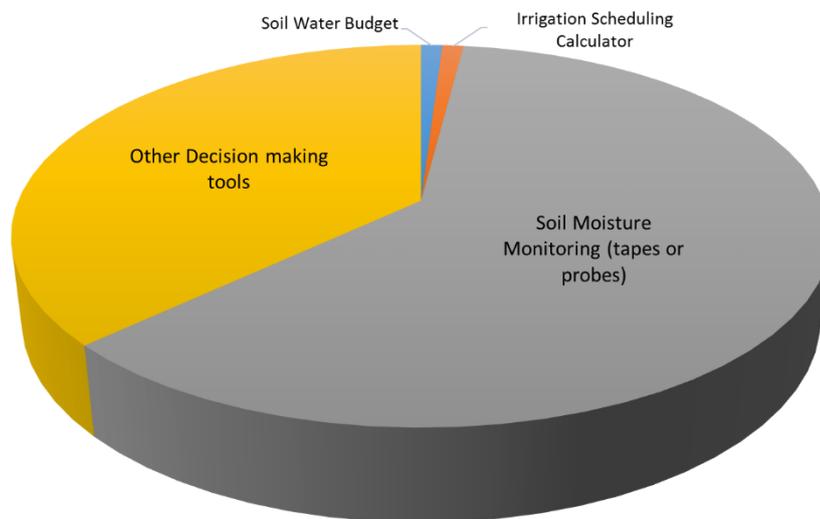


Figure 10. Stage 1 Use of Soil Moisture Monitoring

It is widely recognised that managing water efficiently minimises leaching water and therefore nutrients below the root zone. This includes not over irrigating, and timing irrigation in conjunction with expected rainfall to avoid saturating the soil.

CPWL aims to develop a system that provides both the Scheme and individual irrigators better understanding of soil moisture prior to ordering their scheme water, and is now investigating the upgrade the Scheme’s Rubicon system to enable the provision of individual farm soil moisture holding capacity information to assist farmers when making decisions about whether to irrigate. The ultimate vision is to have this SMM data linked to each individual irrigators CPWL *Customer On Line Water Ordering Portal*, which would trigger an alert when a farmer has ordered water and/or is irrigating but their soil moisture content is a capacity and risks being exceeded (saturated). This system will enable CPWL to contact the irrigator to alert them to this fact and ensure they do not irrigate. This concept is in its infancy and we expect that this will take some time to develop.

5.3.2 Background Conditions

During the 2015-16 irrigation season 439.3mm of rainfall was recorded at [NIWA weather station 4702 located about 4km west of Hororata].

The 12-month annual rainfall total for the period ending 11 May 2016 was 705mm. This was the 8th lowest amount of rain recorded at the site since compared to annual totals from 1981 to present (refer to **Figure 103**. Individual Application Rate (mm/ha) of all CPWL Irrigators, the red indicates those over 5.18mm/ha. The scheme wide average application rate was 2.81mm/ha (green bar).). In terms of river flow and hence water availability, it was a relatively normal season compared to the long-term average.

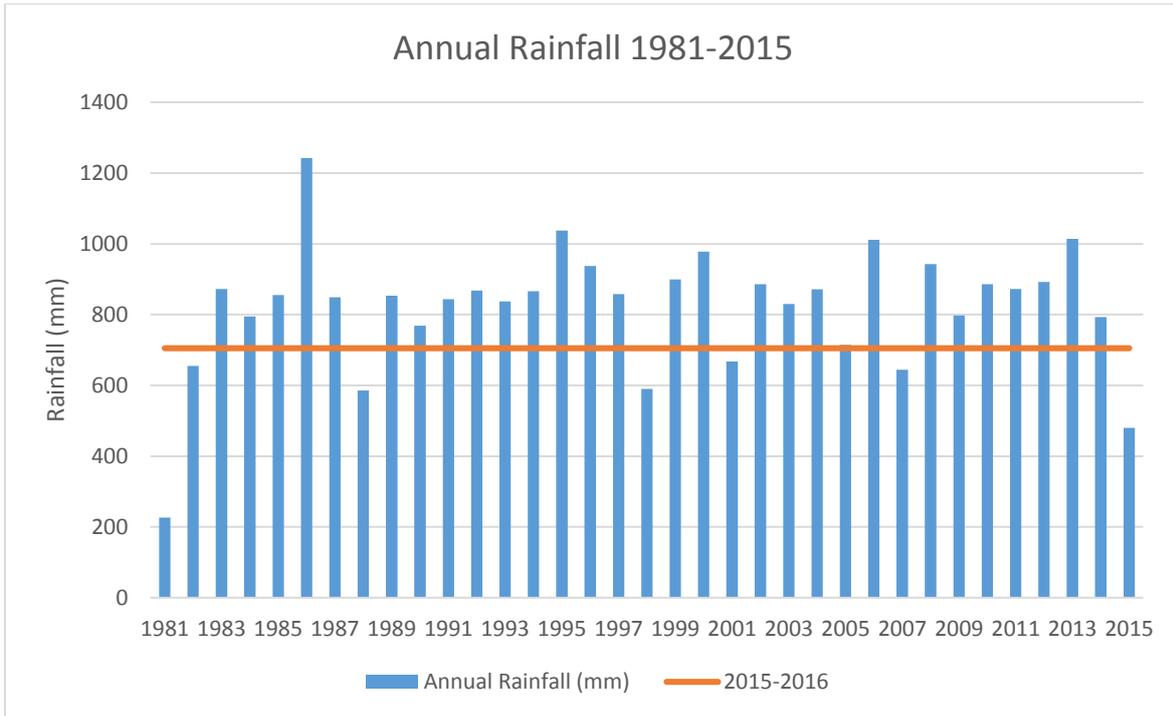


Figure 11. Historic Rainfall at NIWAs Weather Station 4702, Hororata. (Source Niwa Clifo Database).

Rainfall and Soil Moisture Deficit data generated from NIWA’s weather station (4702) for the 2015-16 irrigation season is shown in **Figure 92**. Rainfall and Soil Moisture Deficit Measured NIWA Monitoring Station in Hororata below. The soil at weather station 4072 site was can be classified as being severely dry for 76 days and extremely dry for eight days during the CPWL irrigation season.

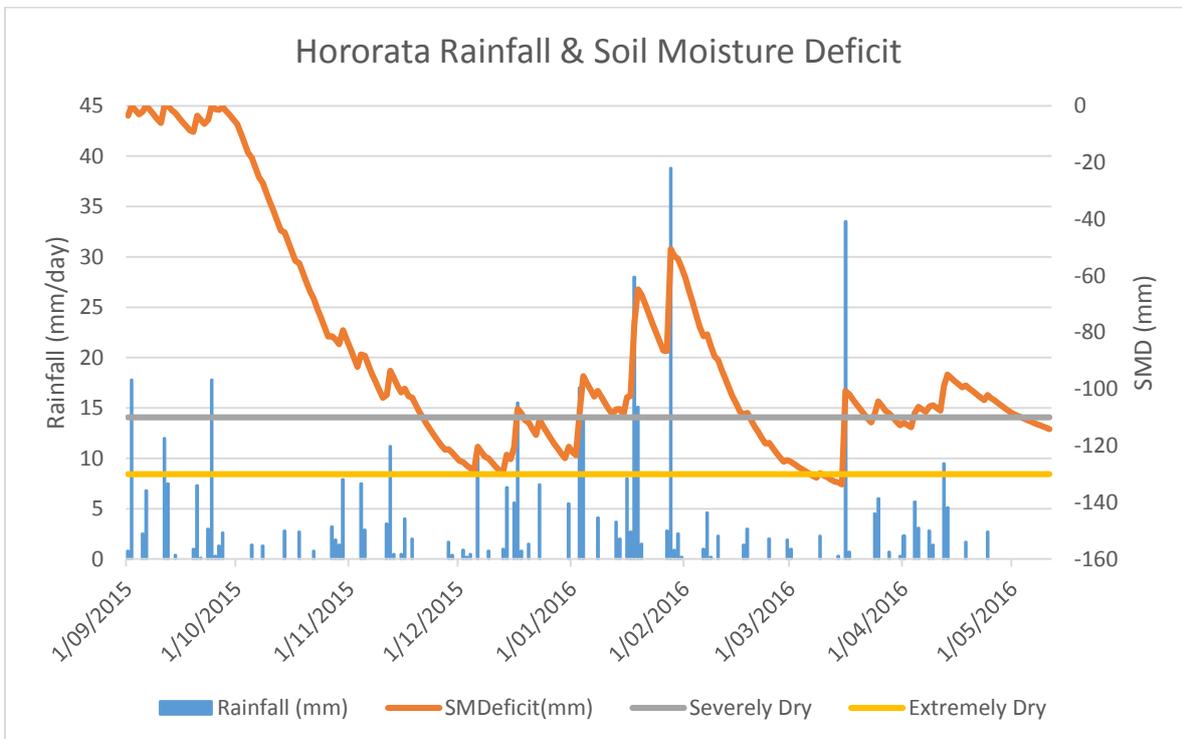


Figure 92. Rainfall and Soil Moisture Deficit Measured NIWA Monitoring Station in Hororata. (Source: Niwa Clifo Database)

5.3.3 Stage 1 Water Use Compliance (CRC165680)

5.3.3.1 Water Use Compliance Requirements

CPWL's use consent (CRC165680), Condition 4 requires the Scheme to *"measure leakage from pipes and structures forming part of the reticulation system that delivers water from the [Waimakariri and] Rakaia River to the farm supply points for comparison with the target of on average not more than 20% of water taken being lost by bywash discharges and leakage from the total reticulation system between 1 September and the following 30 April."*

CPWL's use consent was granted on the basis of an open race distribution or piped network. However, the consent conditions were drafted assuming an open race (unlined) distribution network which included by-wash discharge points. This system was estimated to lose 20% via race seepage and by-wash.

A significant change to the CPWL infrastructure was the decision by CPWL to construct a fully piped distribution network, costlier initially but with longer term operating cost savings. This change successfully mitigated the issue of leakage.

Condition 5 of the Consent requires all water users supplied with irrigation water for irrigation under this consent to *"take all practicable steps to:*

- a. Ensure that the volume of water used for irrigation does not exceed that required for the soil to reach field capacity; and*
- b. Avoid the application of water onto non-productive land such as impermeable surfaces and river or stream riparian strips; and*
- c. Avoid surface runoff from irrigation; and*
- d. Avoid leakage from pipes and structures"*

These all relate to good farm management strategies to minimise any adverse impacts of irrigation on the environment. Each Stage 1 FEP has included a farm risk assessment to identify sensitive areas and put in place measures to ensure compliance with this condition.

CPWL team members have proactively worked with scheme irrigators and ECan to resolve any concerns relating to sensitive irrigation areas, particularly the Hororata and Selwyn Rivers. Dealing with questions on a case by case basis and establishing solutions has worked well to date.

The Stage 1 FEP audits will commence in August 2016 (for the 2015/16 period) and the results of these audits will enable CPWL to report on compliance in relation Condition 5 a to c. Importantly, compliance with these conditions will be informed by a combination of the FEP audit results and the results of CPWL's Compliance report relating to ground and surface water monitoring, which is to be submitted to ECan by the 30th August annually. Giving that the first season's audits will not be available until after preparation of this monitoring report, it will be early 2017 before this information can be fully integrated.

5.3.3.2 Water Application Rates

Condition 6(a) of the consent specifies *"the maximum application rate shall not exceed 5.18mm per day on a scheme-wide basis, provided that this application rate is shown to result in a particular*

property exceeding field capacity then the consent holder shall ensure that the application rate is reduced accordingly."

The scheme wide average application rate during the 1 September 2015 to 30th April 2016 was 2.81mm/ha over the irrigation season. No irrigator exceeded 5.18mm/ha based on their CPWL Take only. **Figure 103.** Individual Application Rate (mm/ha) of all CPWL Irrigators, the red indicates those over 5.18mm/ha. The scheme wide average application rate was 2.81mm/ha (green bar).shows the application rate for the 2015-2016 irrigation season where Groundwater and CPWL irrigators' application rate is calculated by adding the Groundwater application rate to the CPWL application rate to get their overall application rate (Note: it is possible that some of the groundwater taken was used for purposes other than irrigation, such as stockwater, domestic use, etc., therefore the assumptions used for Figure 11 are likely conservative). **Figure 103.** Individual Application Rate (mm/ha) of all CPWL Irrigators, the red indicates those over 5.18mm/ha. The scheme wide average application rate was 2.81mm/ha (green bar).suggests that two irrigators exceeded the 5.18mm/ha application rate, however the 5.18mm limit is assessed against a Scheme-wide rather than individual farm performance, therefore condition 6(a) has been complied with. Nevertheless, CPWL will work with the irrigators to identify any opportunities for improvement.

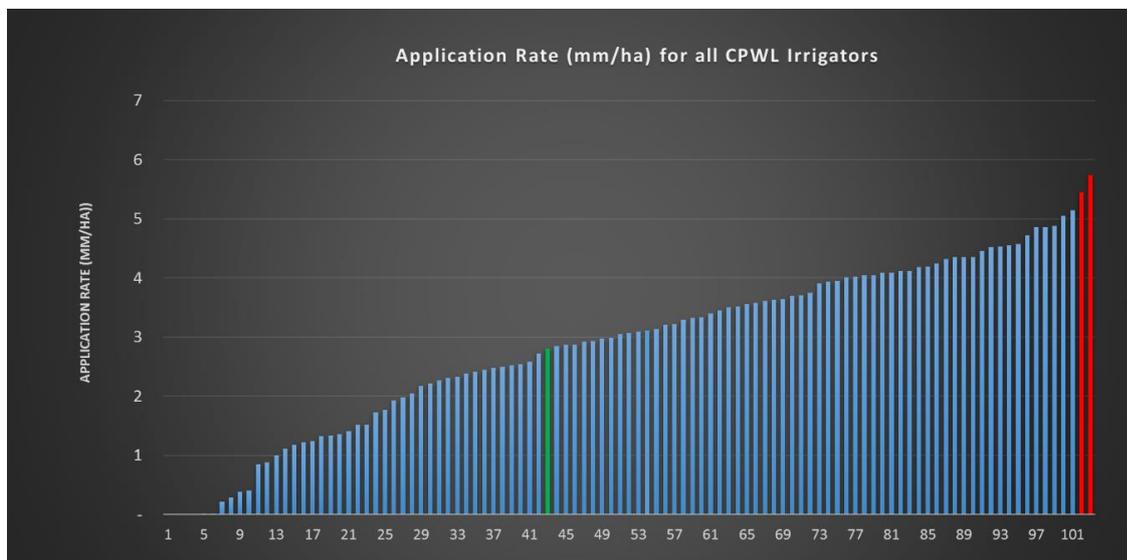


Figure 103. Individual Application Rate (mm/ha) of all CPWL Irrigators, the red indicates those over 5.18mm/ha. The scheme wide average application rate was 2.81mm/ha (green bar).

Condition 6(b) requires that where groundwater and scheme water are applied to land concurrently, the combined volume of water used on that land shall not exceed 6,250m³/ha between 1 July to following 30th June, or their consented groundwater annual volume, whichever is greater.

CPWL has obtained the annual groundwater volume data for the 54 farms that have groundwater consents and have assessed the combined annual volume usage for each of these farms. **(Figure 114.** Shareholders with Groundwater Consents; their consented annual volume compared to the annual groundwater volume they used. i.e. does not include CPWL water for the 2015/2016 irrigation season. The annual volume was either specified in the consent or worked off the flow rate or consecutive day limit. and **Figure 115**Figure 1. ECan Officials Inspect the Intake Gallery and Fish Screen Whilst all appear to have complied with the annual volume limits on their groundwater consents, in combination with the

CPWL water, five irrigators appear to have exceeded the maximum combined volume between 1 July to the following 30th June.

However, given that **Figure 114** and **Figure 115** are based solely on total volumes taken, it is possible that the apparent exceedances may in fact not reflect any non-compliance with a combined volume limit because either:

- CPWL water was used on separate areas to the groundwater taken, therefore the concurrent use limit would not apply; and/or
- Groundwater may have been taken for non-irrigation purposes and only used CPWL water for irrigation, therefore the concurrent use limit would not apply.

CPWL commences a program of farm audits from 1 September 2016. In addition to the matters required to be assessed during the audit process, CPWL will work with the irrigators to identify whether any consent limit has in fact been exceeded, and to develop a methodology to more reliably determine compliance with these combined volume limits going forward.

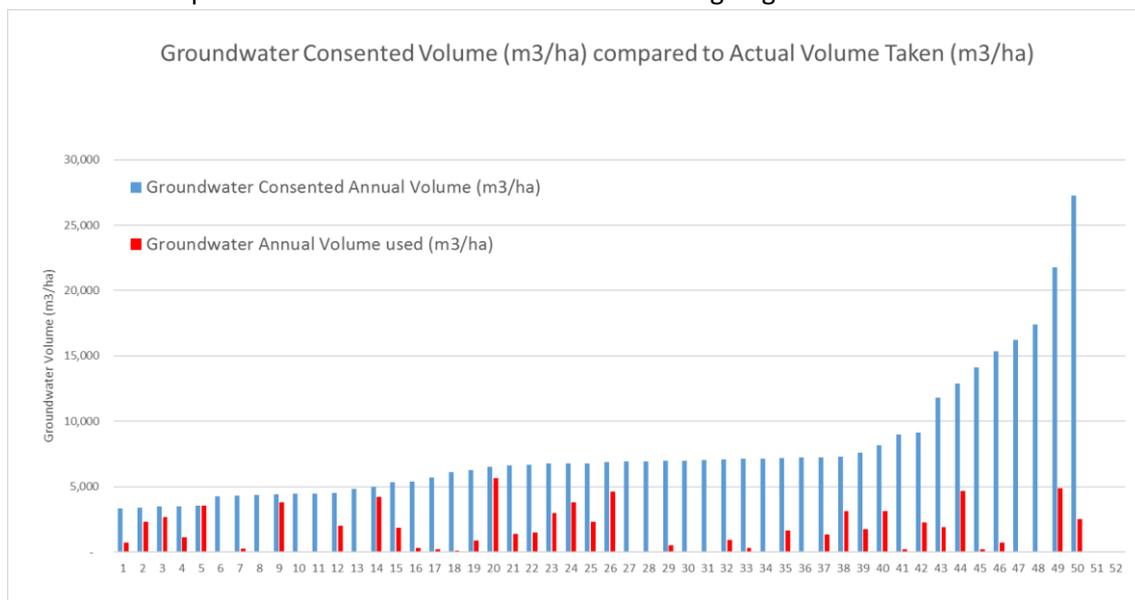


Figure 114. Shareholders with Groundwater Consents; their consented annual volume compared to the annual groundwater volume they used. i.e. does not include CPWL water for the 2015/2016 irrigation season. The annual volume was either specified in the consent or worked off the flow rate or consecutive day limit.

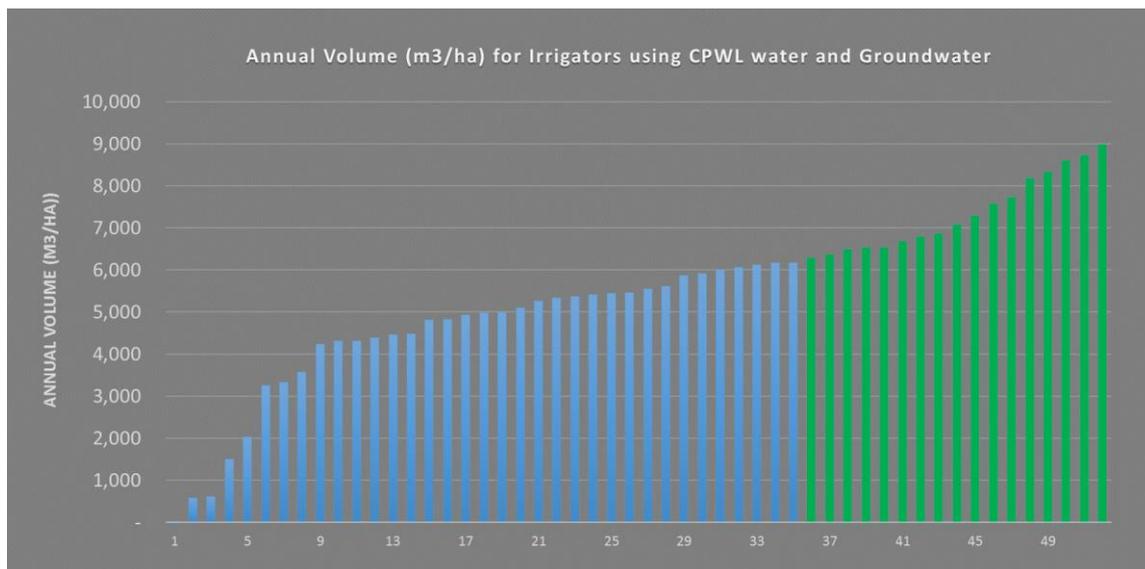


Figure 15. Shareholders with Groundwater Consents combined Annual Take of Groundwater and CPWL water (m³/ha). The blue is those under 6,250m³ and the green indicates irrigators over 6,250m³. All aside from five irrigators are within their consent annual volume (m³/ha).

In carrying out the analysis CPWL became aware of the difficulty of determining the area to base the application rate and combined volume of water per hectare calculations off due to inconsistency between the hectares in the following documents:

- FEP Total Area,
- FEP Effective Area,
- FEP Farm Management Blocks,
- FEP Irrigation Types,
- FEP Irrigation Map,
- Nutrient Budget Block Effective Area,
- Nutrient Budget Total Area Declared as Blocks, and
- Nutrient Budget Total Farm Area

As part of the farm audits, CPWL will work with farmers to determine the CPWL irrigable area, groundwater irrigable area and combined CPWL *and* Groundwater irrigable area on each farm. CPWL also needs to inform farmers of how this information is used so they can understand the importance of providing accurate, reliable and verifiable data.

As part of the audit process, CPWL will also send out a pre-FEP audit letter that outlines the inconsistencies in the above documents and documents their application rate (mm/ha) and annual volume (m³/ha). CPWL also needs to work with the irrigators to gain access to their groundwater telemetry year round to enable compliance tracking against their application rate and annual volume (m³/ha) in a timely manner, rather than post irrigation season.

It is anticipated that this additional information will better enable compliance with conditions 6(a) and 6(b) to be determined and validated. Based on Stage 1 learnings, CPWL will provide Stage 2 shareholders with:

- A checklist of information required for the Nutrient Budgets and FEP's,
- Maps of irrigated area noting the CPWL, Groundwater and combined CPWL *and* Groundwater irrigated areas,
- Groundwater consents and the bores with space for the shareholder to note what each bore is used for e.g. irrigation, stock water, domestic, dairy wash down and the company that it is metered by
- Written approval for CPWL to access their groundwater data.

Due to issues with Overseer the Nutrient Budgets for Stage 1 were undertaken after the FEP's. Now that many of these issues have been resolved, Nutrient Budgets for Stage 2 will be completed before FEPs are developed. This should result in more consistent data between the two documents. CPWL will also hold a meeting with all agri-consultants to provide a checklist of the details CPWL requires and the level of detail in the Nutrient Budgets and FEP's.

5.3.4 Reliability Solution – Season 1 Data and Benefits

As described in Section 3, the Scheme is a run of river (RoR) scheme that is supplemented with stored water. CPWL has a contract with Trustpower whereby stored water is released from Lake Coleridge during periods when the Rakaia River is on full or partial restriction. A Shareholder can choose to augment the reliability of Scheme run of river water by entering into a water storage arrangement which increases the available reliability of their water supply.

A full restriction is when CPWL does not have **any** RoR water available under its consent, but it can still supply stored water. A partial restriction means CPWL has **insufficient** RoR water available under its consents to meet the entire demand required by shareholders. Under a partial restriction scenario, CPWL Shareholders have the option to top up RoR water with stored water. During periods of 'no restriction' CPWL has **sufficient** RoR water available under its consents to meet Shareholder demand.

It is typically expected that three-quarters of irrigation water demand will be provided by RoR water, with the remaining quarter being supplied via stored water. **Figure** illustrates the run of river water (orange) that was available for CPWL to abstract across the 2015/2016 irrigation season, and time when the river was running low/on restriction and abstraction is enabled by the release of TrustPower stored water (white).

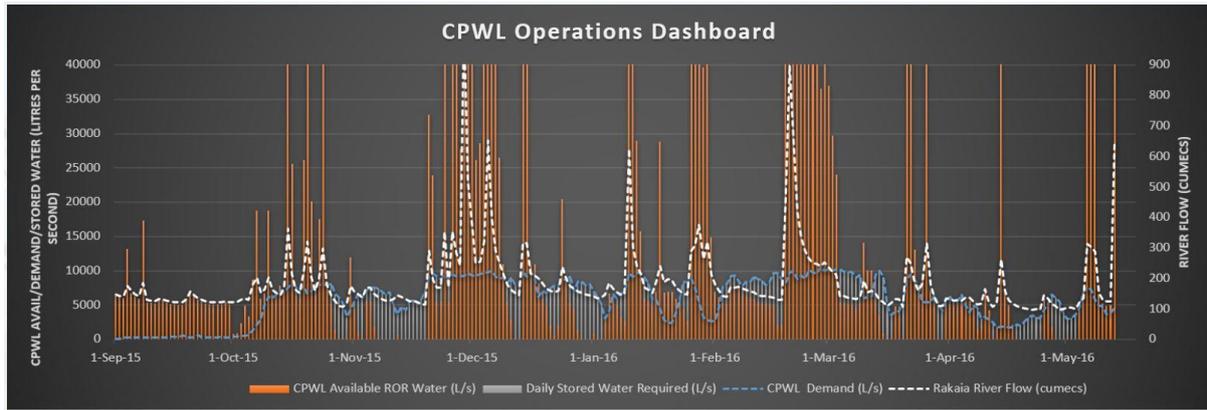


Figure 16. CPWL Take based on available Run of River Water and Stored Water Top Up

5.3.4.1 Run of River and Stored Water Usage

67,214,621m³ of run of river water was taken by Stage 1 farmers during the first irrigation season. Between 1 September and mid-May the Scheme operated under no restriction for 152 days, partial restriction for 84 days, and full restriction for only 18 days. In addition to run of river water, 23,878,363m³ of stored water was ordered, representing 26% of total volume of taken water.

While the scheme could supply water for 254 days, the actual days a farmer would irrigate is in the order of 150 days. Provided enough stored water was contracted, farmers were able to have full reliability of supply for the 2015-16 season.



On a scheme wide basis, the average amount of CPWL water used per hectare supplied by the Scheme was 4112m³/ha. Note, this does not include the use of groundwater, which is discussed in the section below.

5.3.5 Ground Water Conversion to CPWL Water

5.3.5.1 Stage 1 Retired Groundwater

Amount of CPWL water and groundwater used by Customers

Of the 105 farms covered under CPWL’s compliance umbrella (FEP’s), there are a total of 152 consented groundwater bores that relate to a total of 54 properties (13,385) with total annual volume of 97,207,658m³. This AV per property equates to an average of 7,277m³/ha. We know that on average Stage 1 irrigators used 4112m³/ha of Scheme water. Adding the abstracted groundwater to this gives a total average combined usage per property of 5,172m³/ha. This would suggest that existing groundwater irrigators were not using their full consented groundwater annual volume.

CPWL’s consent limits the combined use of groundwater and CPWL water to 6250m³/ha/yr, or the volume authorised on a groundwater irrigation permit if that volume is greater than 6,250m³/ha.

The following data is based on actual usage information obtained from the 54 properties. During the 2015/16 irrigation season **30** groundwater bores have discontinued pumping **Figure 17**. Number of CPWL Irrigators bores in Stage 1, the number of bores not being used for Irrigation and the annual groundwater consented volume. 30 bores (21 Million m³ of consented groundwater take) has been switched off and 5 bores are now being used only for e.g. stock water, dairy wash down water and/or domestic water. A further 5 bores reduced take to stock water only. Additional bores were stopped during the season [these are not included in the numbers of bores discontinuing as we have not collected data for these bores]. The total consented annual volume of the 30 bores discontinued is 19Mm³ (18,924,806m³). CPWL has identified that the farm area previously irrigated by this groundwater was ~2,146ha.

Approximately 75% of the groundwater we would expect pre-CPWL irrigator farmers to use was therefore switched off as a result of the first CPWL irrigation season (based on the assumption that 16,784ha of groundwater irrigated land would typically use between 4,000 to 5,000m³/ha/yr).

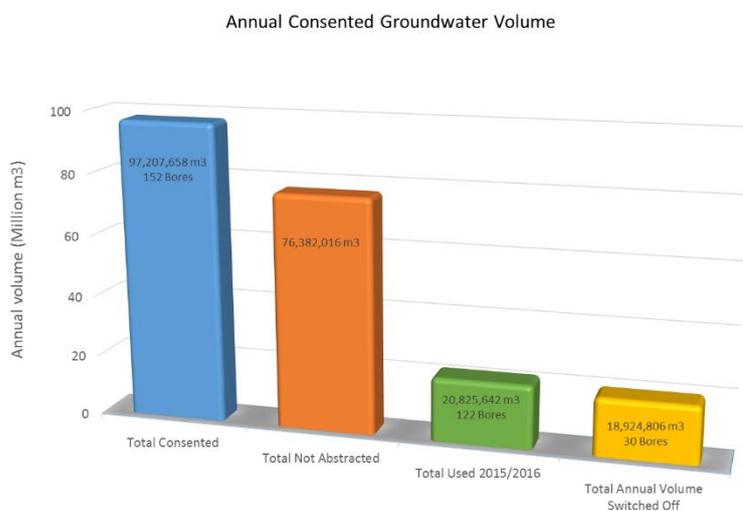


Figure 17. Number of CPWL Irrigators bores in Stage 1, the number of bores not being used for Irrigation and the annual groundwater consented volume. 30 bores (21 Million m³ of consented groundwater take) has been switched off and 5 bores are now being used only for e.g. stock water, dairy wash down water and/or domestic water.

The percentage of the consented annual volume used across each of the 54 properties (**Figure 8**) indicates 37 property abstractors have reduced their abstraction to between zero and 25% of their consented annual volume.

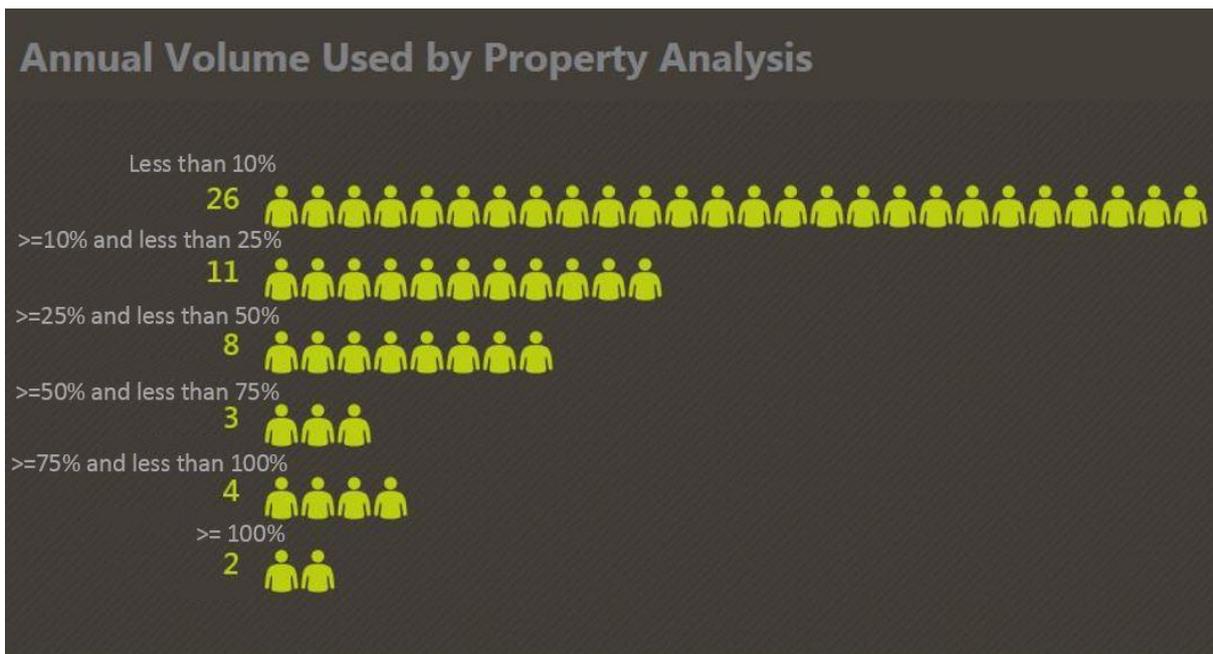


Figure 18. Percentage of the consented volume used by each of the 54 properties.

6.0 On- Farm Compliance

6.1 FEP Audits and Training

Following completion of the first irrigation season CPWL’s focus now shifts to implementing the FEP audit programme and assessing what areas of training will be most beneficial to shareholders.

CPWL are going to start the FEP audit programme with five ‘pilot’ audits in August 2016. The remainder of FEP audits are scheduled to begin in September 2016.

The audit findings will be useful to help inform CPWL on what priorities should be made to the training programme that will be offered to farmers. Soil Moisture Monitoring will likely be one of the initial subjects covered.

7.0 Next Steps

Between now and the start of the 2016-17 Irrigation season, CPWL will continue to work with our Stage 1 water users to ensure their nutrient budgets are in place. The information gathered from the nutrient budgets will be used along with CPWL’s Nutrient Allocation Strategy to assign nitrogen allocations prior to the start of the next irrigation season. Further investigation into the use of groundwater is also required, and a methodology to enable a more proactive approach to managing compliance with combined annual volume limits will be developed in consultation with shareholders.

CPWLs FEP audit programme is set to begin with five pilot’ audits during August 2016. The main programme of auditing Stage 1 FEPs is set to commence during September 2016. At the conclusion of the audit programme CPWL will identify areas of further improvement and assess the measures the Scheme can implement to assist farmers with achieving improved environmental performance.

Once Stage 1 audits are complete the results will be overlain with the Ground and Surface Water monitoring data for Stage 1 to provide an indication of any potential hot spots CPWL need to continue to monitor closely.

Work continues with the design of Stage 2 of the Scheme. CPWL are working towards commencing construction of Stage 2 in December 2016 and having the Scheme operational for the start of the 2018-19 Irrigation season.

8.0 Appendices

- 8.1 Farm Environment Plans Content Requirements
- 8.2 Terms of Reference for Community Liaison Group
- 8.3 Terms of Reference for EMF

Appendices 8.1 Farm Environment Plans Content Requirements

APPENDIX CRC165686 – Farm Environment Plan

Part A – Farm Environment Plans

The Farm Environment Plan shall be based on the material set out in Part B or Farm Environment Plan template and guidance material that has been approved in writing by the Chief Executive of the Canterbury Regional Council. Any Farm Environment Plan based on an approved template shall also include the following components set out in Part B:

1. Nutrient Management targets 1, 2 and 5;
2. Waterbody Management target 2;
3. Native Plants and Animals objective and target 1;
4. Section 4; and
5. Section 6.

Part B – Farm Environment Plan Default Content

The plan shall contain as a minimum:

1. Property or farm enterprise details
 - a. Physical address
 - b. Description of the ownership and name of a contact person
 - c. Legal description of the land and farm identifier
2. A map(s) or aerial photograph at a scale that clearly shows:
 - a. The boundaries of the property or land areas comprising the farm enterprise.
 - b. The boundaries of the main land management units on the property or within the farm enterprise.
 - c. The location of permanent or intermittent rivers, streams, lakes, drains, ponds or wetlands.
 - d. The location of riparian vegetation and fences adjacent to water bodies.
 - e. The location on all waterways where stock access or crossing occurs.
 - f. The location of any areas within or adjoining the property that are identified in a District Plan as “significant indigenous biodiversity”.
 - g. The location of any critical source areas for phosphorus or sediment loss for any part of the property within the Phosphorus Sediment Risk Area.
 - h. The location of flood protection or erosion control assets, including flood protection vegetation.
 - i. Public access routes or access routes used to maintain the rivers, streams, or drains.
 - j. The location of any known mahinga kai, wāhi tapu or wāhi taonga within any property or farming enterprise located in the Cultural Landscape/Values Management Area.
3. A list of all Canterbury Regional Council resource consents held for the property or farm enterprise.
4. An assessment of the adverse environmental effects and risks associated with the farming activities and how the identified effects and risks will be managed, including irrigation, application of nutrients, effluent application, stock exclusion from waterways, offal pits, farm rubbish pits, transitional activities associated with installing irrigation infrastructure and any specific measures to be implemented to ensure that the cultural health objectives of the Ground and Surface Water Plan review by GSWERP as set out within Schedule 2 attached to consent CRC165686, or any subsequent replacements or variations thereof.
5. A description of how each of the following objectives and targets for each Management Area will, where relevant, be met and the specific actions that will be undertaken to implement the Good Management Practices. The plan for each objective shall include:
 - a. detail commensurate with the scale of the environmental effects and risks;
 - b. a description of the actions and Good Management Practices (and a timeframe within which those actions will be completed) that will be implemented to achieve the objectives and targets.
 - c. records required to be kept for measuring performance and achievement of the targets and objectives.

APPENDIX CRC165686 – Farm Environment Plan

Management Area: Nutrient Management

Objective: To maximise nutrient use efficiency while minimising nutrient losses to water.

Targets:

- (1) Achieving good management practice in respect of nutrient losses.
- (2) Phosphorus and sediment losses from farming activities are minimised.
- (3) Managing the discharge from drains within the Lake area of the Cultural Landscape/Values Management Area.
- (4) The amount and rate of fertiliser applied does not exceed the agronomic requirements of the crop.
- (5) Further reducing the nitrogen loss calculation from 2022 where a property or farming enterprise's nitrogen loss calculation is greater than 15 kg of nitrogen per hectare per annum.

Management Area: Irrigation Management

Objective: To operate irrigation systems efficiently ensuring that the actual use of water is monitored and is efficient.

Targets:

- (1) New irrigation infrastructure is designed, installed and operated in accordance with industry best practice standards.
- (2) Existing irrigation systems are calibrated, maintained and operated to apply irrigation water at the optimal efficiency.
- (3) All applications of irrigation water are justified on the basis of soil moisture data and climatic information.
- (4) The timing and rate of application of water is managed so as to not exceed crop requirements or the available water holding capacity of the soil.
- (5) Staff are trained in the operation, maintenance and use of irrigation systems.

Management Area: Soils Management

Objective: To maintain or improve the physical and biological condition of soils in order to minimise the movement of sediment, phosphorus and other contaminants to waterways.

Targets:

- (1) Farming activities are managed so as to not exacerbate erosion.
- (2) Farming practices are implemented that optimise infiltration of water into the soil profile and minimise run-off of water, sediment loss and erosion.

Management Area: Collected Animal Effluent Management

Objective: To manage the risks associated with the operation of effluent systems to ensure effluent systems are compliant 365 days of the year.

Targets:

- (1) Effluent storage facilities and effluent discharges comply with regional council rules or any granted resource consent.
- (2) The timing and rate of application of effluent and solid animal waste to land is managed so as to minimise the risk of contamination of groundwater or surface water bodies.
- (3) Sufficient and suitable storage is available to store effluent and any wastewater when soil conditions are unsuitable for application.
- (4) Staff are trained in the operation, maintenance and use of effluent storage and application systems.

APPENDIX CRC165686 – Farm Environment Plan

Management Area: Waterbody Management (wetlands, riparian areas, drains, rivers, lakes)

Objective: To manage wetlands, riparian areas and surface waterbodies to avoid damage to the bed and margins of a water body, and to avoid the direct input of nutrients, sediment, and microbial pathogens.

Targets:

- (1) Stock are excluded from waterbodies in accordance with regional council rules or any granted resource consent.
- (2) Riparian margins are planted and vegetation is maintained to minimise nutrient, sediment and microbial pathogen losses to waterbodies.
- (3) Farm tracks, gateways, water troughs, self-feeding areas, stock camps wallows and other sources of sediment, nutrient and microbial loss are located so as to minimise the risks to surface water quality.

Management Area: Point Sources Management (offal pits, farm rubbish pits, silage pits)

Objective: To manage the number and location of pits to minimise risks to health and water quality.

Target:

- (1) All on-farm silage, offal pit and rubbish dump discharges are managed to avoid direct discharges of contaminants to groundwater or surface water.

Management Area: Water-use Management (excluding irrigation water)

Objective: To use water efficiently ensuring that actual use of water is monitored and efficient.

Target:

- (1) Actual water use is efficient for the end use.

Management Area: Native Plants and Animals

Objective: To avoid, remedy or mitigate effects on native plants and native animal and their habitats on individual farm properties.

Target:

- (1) Maintain native plant and animal habitat, enhance where possible.

6. Nutrient budgets shall be:
 - a. prepared by a suitably qualified person using the current version of the Overseer™ nutrient budget model, or equivalent model approved by the Chief Executive of Environment Canterbury,
 - b. prepared for all of the land within each of the properties specified in consent condition 1; and
 - c. prepared for the upcoming 12 months. At the end of each 12 month period the modelling shall be revised, if necessary, to accommodate any differences between the projected modelling and actual farm practice, to calculate the average annual amount of nitrogen loss to water from the subject land.

APPENDIX CRC165686 – Farm Environment Plan

Part C – Farm Environment Plan Audit Requirements

The Farm Environment Plan must be audited by a Farm Environment Plan Auditor who is independent of the farm being audited (i.e. is not a professional adviser for the property) and has not been involved in the preparation of the Farm Environment Plan.

A Farm Environment Plan Auditor is a person who can provide evidence of at least 5 years' professional experience in the management of pastoral, horticulture or arable farm systems and holds either:

1. a Certificate of Completion in Sustainable Nutrient Management in New Zealand Agriculture from Massey University;
2. a Certificate of Completion in Advanced Sustainable Nutrient Management in New Zealand Agriculture from Massey University; or
3. such other qualification that has been approved by the Chief Executive of the Canterbury Regional Council as containing adequate instruction and assessment on agricultural sciences and nutrient management.

The auditor shall determine the level of confidence they have that each objective, target and Good Management Practice has been achieved. This level of confidence shall be categorised into the following:

- High = The objective has probably been achieved;
- Medium = The objective has possibly been achieved; or
- Low = It is unlikely that the objective has been achieved.

The audit shall record the justification for each level of confidence assessment, including noting the evidence, or lack of, used to make the determination. Where an objective has received a Medium or Low level of confidence, the audit shall include the required actions for the farm to meet the objective. Where an objective has received a Medium level of confidence (and the farm has received no Lows), the audit shall also determine whether or not the farm is on-track to achieve the objectives.

The audit shall record the overall audit grade based on the results of the level of confidence assessment as follows:

- A grade = All Highs;
- B grade = One or more Mediums and no Lows, but on-track to achieve the objectives;
- C grade = One or more Mediums and no Lows, but not on-track to achieve the objectives; or
- D grade = Any Lows.

The grade of the previous audit sets the timeframe until the next audit is required as follows:

- A grade = 4 years;
- B grade = 2 years;
- C grade = 12 months; or
- D grade = 6 months.

An exception applies to farms where an audit grade of A or B has been achieved. Where the manager of the farm changes or the farm system changes, then an audit shall be under taken within 12 months of the change. A change in the farm system means whole farm operation conversions, including but not limited to, converting between dairy support, dairy platform, sheep & beef and cropping; and also any introduction of a new stock type to the farm, e.g. deer or wintering dairy cows. Changes such as, varying the type of crop grown or varying the relative proportions of stock types do not constitute a farm system change.

Appendices 8.2 Terms of Reference for Community Liaison Group

Appendices 8.3 Terms of Reference for EMF



Dated: August 2016



CENTRAL PLAINS WATER

**TERMS OF REFERENCE for the
ENVIRONMENTAL MANAGEMENT
FUND
(Administration)
RESOURCE CONSENT CRC165680**

**CANTERBURY REGIONAL COUNCIL
CENTRAL PLAINS WATER TRUST
CENTRAL PLAINS WATER LIMITED**

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TERMS OF REFERENCE for the ENVIRONMENTAL MANAGEMENT FUND (administration)

1. BACKGROUND

- 1.1 The Canterbury Regional Council granted resource consent CRC165680 ("**Resource Consent**") to Central Plains Water Trust to use water from the Rakaia River and Waimakariri River.
- 1.2 The Resource Consent requires the consent holder to establish an Environmental Management Fund ("**EMF**").
- 1.3 The Resource Consent also requires the consent holder to establish an Environmental Management Fund Committee ("**EMFC**") for the purpose of administering the EMF.
- 1.4 The initial value of the EMF at 1 September 2015 was \$300,000. The fund is supplemented annually through Shareholder levies. Shareholders are levied pro rata from the commencement of their first irrigation season. The levied funds will be available after the end of each irrigation season.
- 1.5 Proposals for EMF use can be made by the GSWERP, the Community Liaison Group ("**CLG**"), Shareholders, local community or interest groups, schools, charitable trusts, or other person or group within the Selwyn District.

This document sets out the terms of reference under which the EMF will be administered to fulfil the requirements of the conditions of the Resource Consent.

2. DEFINITIONS AND CONSTRUCTION

- 2.1 **Defined terms:** In these Terms of Reference, unless the context requires otherwise:
 - (a) "**Administrative Condition**" refers to a condition that is contained in "Schedule 2: Administrative Conditions" of the Resource Consent;
 - (b) "**CLG**" means the Community Liaison Group required by the Administrative Conditions;
 - (c) "**EMF**" means the Environmental Management Fund;

- (d) “**EMFC**” means the Environmental Management Fund Committee;
- (e) “**GSWERP**” means the Ground and Surface Water Expert Review Panel;
- (f) “**GSW Plan**” means the Ground and Surface Water Plan as described in Administrative Condition 21;
- (g) “**Project**” means works funded by the EMF;
- (h) “**Proposal**” means a proposal for funding from the EMF.
- (i) “**Resource Consent**” means resource consent CRC165680 granted by Canterbury Regional Council to Central Plains Water Trust
- (j) “**Scheme**” means the Central Plains Water Enhancement Scheme
- (k) “**Shareholders**” means shareholder of the Scheme who receive Scheme water.

2.2 **Construction:** In the construction of these Terms of Reference, unless the context requires otherwise:

- (a) a reference to “members” is a reference to the members for the time being of the EMFC, whether the original appointees, additional or substituted;
- (b) a reference to a person includes a corporation sole and also a body of persons, whether corporate or unincorporate; and
- (c) headings appear as a matter of convenience and shall not affect the construction of these Terms of Reference.

3. **PURPOSE AND PRINCIPLES OF THE EMF**

Purpose

3.1 The EMF is described in Administrative Condition 2 as being established for the purpose of¹:

- (a) environmental mitigation of the effects of the operation of the water enhancement scheme which is not otherwise required by the

¹ Schedule 2 Administrative Conditions, condition 2

individual Farm Management Plan or specific consent conditions;
and

- (b) environmental management projects within the area affected by the operation of the Scheme as shown on Plan CRC165680.

3.2 The fund will be used to assist groups and individuals in the scheme area, or areas affected by the scheme, to undertake maintenance, restoration and improvement projects or activities.

Principles

3.3 Without limiting the role of the EMF, Projects must reflect the vision and principles of the Central Plains Water Trust:

- (a) Achieve the sustainable management of land and water; and
- (b) Enhance biodiversity in the Selwyn District.

3.4 Proposals for consideration by the EMFC should:

- (a) Provide for mitigation outcomes identified by the GSWERP;
- (b) Contribute toward Scheme shareholders' environmental enhancement proposals within the Scheme area; and/or
- (c) Contribute toward other environmental enhancement proposals in the wider Selwyn District.

Proposals

3.5 Proposals will be judged on the extent to which they will contribute to maintaining and enhancing environmental management. Consideration will be given to proposals that achieve some of the following outcomes:

- (a) mitigation response to adverse environmental Scheme effects identified by GSWERP;
- (b) protect, enhance or restore native species, habitats, natural features, or historic or cultural heritage;
- (c) improve sustainable land and water management;
- (d) mitigate or remedy adverse environmental, social or cultural effects of the scheme construction or operation;

- (e) increase community understanding and involvement that contributes to sustainable management and healthy resources;
- (f) promote information/knowledge exchange of the natural management of rural communities;
- (g) complement landowner contributions and leverage contributions from other sources.

Assessment criteria

3.6 Proposals will also be assessed by the EMFC against the following criteria to consider the ecological value of the Proposal.

- (a) GSWERP advice: The primary purpose of the EMF is to mitigate identified adverse Scheme effects; this criteria will take precedence over all others.
- (b) The likely outcomes of the project, including ecological outcomes of wider benefit such as:
- (c) Maintaining ecological processes;
- (d) Restoring connectivity between existing indigenous vegetation or existing habitats of indigenous species;
- (e) Providing a buffer for the habitat of indigenous species;
- (f) The extent to which the project benefits important cultural, spiritual, historical or traditional values;
- (g) The extent to which the project broadens the base of community effort and level of support for biodiversity and sustainable land management;
- (h) The contribution to the project from other sources (including in-kind contributions);
- (i) Overall value for money, based on costs and the potential benefits;
- (j) The feasibility of the project to achieve its stated objectives;
- (k) The urgency and nature of threats that the project proposes to alleviate;

- (l) The extent to which the project is likely to generate effective on-going actions so as to avoid future dependency on support from the fund;
- (m) The gains from linkages between the proposed project and other work being carried out in the area.

Sole discretion

- 3.7 The EMFC will determine funding allocations (in its sole and absolute discretion) and its decisions will be final. Approval may be subject to conditions.
- 3.8 No legal or other obligations shall arise between an applicant and the EMFC and/or CPWL in relation to the conduct or outcome of the application process.

4. PROPOSALS

- 4.1 Proposals can be submitted electronically via email to the following address:

emf@cpwl.co.nz

Alternatively, hard copy Proposals can be posted to:

[Central Plains Water Ltd, PO Box 9424, Tower Junction, Christchurch 8149](#)

- 4.2 Proposals are to be submitted annually prior to 1st August.
- 4.3 Unless the Proposal is a mitigation measure recommended by the GSWERP, only individuals or groups proposing environmentally sustainable Proposals are eligible.
- 4.4 Funding will only be awarded to Proposals that promote the vision and principles of the Central Plains Water Trust.
- 4.5 Priority will be given to Proposals within the Scheme command area.
- 4.6 A management plan for the Proposals must be included with the application. The management plan must include, but is not limited to:
 - (a) A description of the proposal;
 - (b) Location of the proposal;

- (c) Cost and benefit(s) of the proposal;
 - (d) Project leadership and implementation (including timeframe);
 - (e) Any authorisations required for the proposal (i.e. resource consents);
 - (f) Details of the longevity of the proposal (i.e. maintenance requirements, costs, responsibility); and
 - (g) Reporting outcomes.
- 4.7 A third party/landowner contribution is not required but priority will be given to a joint-funding proposal. Note: This can be an 'in-kind' contribution such as labour.
- 4.8 Proposed projects should generally be on private or customary land. Projects on public land may be considered on a case by case basis.
- 4.9 Affected landowner(s) must support the Proposal.
- 4.10 Proposals which involve partnerships with other organisations and individuals are preferred.

Examples

- 4.11 Examples of Proposals likely to meet EMF criteria include:
- (a) projects that focus on protecting significant* existing habitats;
 - (b) projects that maintain or enhance linkages between indigenous habitats;
 - (c) projects that protect or enhance the natural character of indigenous habitats and ecosystems (i.e. riparian fencing and planting; weed management; fencing of native bush; creating, fencing and planting a wetland, etc.)

* Significant - refers to habitats and ecosystems that are significant due to their representativeness, rarity, distinctiveness, or ecological context. Some examples may include habitats that: support threatened or endemic species; provide important linkages or corridors between significant habitats; are of a type that is rare, such as wetlands; and areas of indigenous vegetation.

Limitations

- 4.12 Without limitation, the following types of Proposals will not be considered for funding under the EMF:
- (a) Reimbursement of costs incurred prior to the application being made or for projects already completed;
 - (b) Proposals designed to generate personal or commercial profit;
 - (c) Projects more appropriately funded by other organisations;
 - (d) Projects or activities outside the scheme area, unless the project is to mitigate or remedy an adverse effect of the scheme, including offset mitigation.
 - (e) Proposals that are a government, local authority or other public body responsibility or requirement (including works that are required as part of a resource consent).

Confidentiality

- 4.13 Information relating to Proposals, whether accepted or not, shall not be advised to the media or published on any social media forum without the express permission of CPWT.

5. EMF EFFECT MITIGATION RESERVE

- 5.1 The EMFC intends to set aside a portion of the EMF (with a minimum value of \$75,000) for projects identified by GSWERP.²

6. CONTACTS

- 6.1 The primary contact for any enquiries is Susan Goodfellow:

sgoodfellow@cpwl.co.nz

7. ADMINISTRATION

- 7.1 The EMF is levied upon Shareholders from the date that irrigation water is supplied to their property, in general accordance with Administrative Condition 5 and agreement by the Canterbury Regional Council.

² GSWERP directed works may cost more than \$50,000 and the \$50,000 reserve is not an upper limit of expenditure on works directed by the GSWERP. The reserve is a minimum amount that the EMFC intends to be retained for this express purpose.

7.2 The EMF will be held and administered by Central Plains Water Limited to facilitate EMF use in accordance with Administrative Condition 9.

.....
Susan Goodfellow
General Manager Environmental
CENTRAL PLAINS WATER LTD

Dated:.....

APPENDIX A

CRC165680 Use water from the Rakaia and Waimakariri Rivers

Schedule 2: Administrative Conditions

Environmental Management Fund

1. Prior to the exercise of this consent, the consent holder shall establish:
 - (a) an Environmental Management Fund (EMF) to be managed and distributed by an independent Environmental Management Fund Committee (EMFC) for the purpose of:
 - (i) environmental mitigation of the effects of the operation of the water enhancement scheme which is not otherwise required by the individual Farm Environment Plans (FEPs) or specific consent conditions; and
 - (ii) environmental management projects within the area affected by the operation of the scheme as shown on Plan CRC165680.
 - (b)
 - (i) a Te Waihora Environmental Management Fund (TWEMF) to be managed and distributed by Te Rūnanga o Ngāi Tahu.
 - (ii) no later than 31 August each year, Te Rūnanga o Ngāi Tahu shall submit a report to the consent holder setting out the projects supported by the TWEMF
2. Prior to the exercise of this consent, the consent holder shall establish an EMFC. There shall be at least six members on the EMFC and shall include representatives of:
 - (a) Central Plains Water Trust or Central Plains Water Limited;
 - (b) Te Rūnanga o Ngāi Tahu (being two individuals proposed by Te Rūnanga o Ngāi Tahu);
 - (c) environmental and recreational interests;
 - (d) community interests; and
 - (e) Selwyn District Council, Christchurch City Council, Canterbury Regional Council and/or a representative from the Canterbury Water Management Strategy Selwyn-Waihora zone committee.

The nominated membership of the EMFC shall be submitted to the CRC attention Compliance Enforcement Manager, who will confirm their suitability prior to the EMFC being able to operate.
3. The fund shall not be utilised for any of the following:
 - (a) measures required by any resource consent conditions;
 - (b) any administration or education associated with any resource consent conditions, the EMS, or FEPs.
4. The consent holder shall submit a report to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement Officer which details the following:
 - (a) fund structure and management;
 - (b) the level of levy (initially at least \$0.40 per share per annum);

- (c) criteria for seeking, selecting and approving applications;
 - (d) criteria for a rebate of the levy to recompense water users for the capital costs of environmental enhancement work on water users' own properties, which is not otherwise required by their Farm Management Plan or the consent conditions (up to 50% rebate of the levy paid by any one water user in any one year).
5. By the time 10,000 hectares of land is irrigated under this scheme, the EMF shall have a minimum amount of \$300,000. Each water user that enters a Water Users Agreement with the consent holder shall commence paying the levy from the date which the Water Users Agreement is signed.
 6. The levy shall increase annually based on the all groups consumer price index as published quarterly by Statistics NZ. The initial rate of 40 cents per share shall be established as equivalent to the all groups consumer price index for 1 July 2010. The first annual adjustment of the levy shall take place on 1 July 2011.
 7. The priority for the distribution and use of the scheme EMF shall be the following environmental mitigation if it is not also required by the individual FEPs or consent conditions specified in resource consents CRC165680 and CRC165686, or any replacement or subsequent variation thereof, or the Groundwater and Surface Water Plan:
 - (a) Minimising nutrient losses to lowland streams and Te Waihora/Lake Ellesmere;
 - (b) Excluding stock from wetlands, riparian margins and beds of rivers and streams,
 - (c) Physical protection or enhancement of indigenous vegetation planting along riparian margins;
 - (d) Indigenous wetland enhancement or indigenous wetland creation, including the development of indigenous wetlands along intermittent streams;
 - (e) Permanent protection of wetland areas that may contain mudfish.
 8. The consent holder shall facilitate the use of the Environmental Management Fund to implement and where appropriate maintain meaningful environmental enhancement projects which will commence as soon as practicable following the first exercise of the water use consent CRC165680.



Dated August 2016



**GUIDELINE for
ENVIRONMENTAL MANAGEMENT
FUND
PROPOSALS**

**CANTERBURY REGIONAL COUNCIL
CENTRAL PLAINS WATER TRUST
CENTRAL PLAINS WATER LIMITED**

1. **GUIDELINES**

These guidelines are intended to help you complete an application form for the **Central Plains Water Environmental Management Fund**. Following these guidelines will assist you in providing the necessary information to allow a fair and effective assessment of your application.

If you have any problems completing your application, please contact Central Plains Water via email emf@cpwl.co.nz. Incomplete applications make it difficult to assess and potentially fund your project.

2. **WHAT IS THE ENVIRONMENTAL MANAGEMENT FUND?**

Central Plains Water was granted a number of resource consent for the Central Plains Water Enhancement Scheme. A condition of the consents requires that Central Plains Water establish a fund for the purpose of mitigating Scheme effects and/or environmental enhancement. Priority is given to proposals within the Scheme area, though consideration will be given to proposals within the wider Selwyn/Te Waihora catchment.

3. **WHAT IS THE PURPOSE OF THE FUND?**

The Environmental Management Fund has been established for the purpose of mitigating identified adverse environmental effects of the operation of the Water Enhancement Scheme, and environmental management projects within the area affected by the operation of the Scheme. The fund will be used to assist groups and individuals in the scheme area, or areas affected by the scheme, to undertake maintenance, restoration and improvement projects or activities.

Proposals for consideration by the EMFC should contribute toward Scheme shareholders' environmental enhancement proposals within the Scheme area and/or contribute toward other proposals in the wider Selwyn District.

4. **WHO CAN APPLY?**

Eligible applicants must reside or operate in the Selwyn/Te Waihora catchment (though priority will be given to applicants within the Scheme area), and may include:

- Private land owners and managers;
- Professional and community based organisations working on sustainable land and water management or on protecting and managing indigenous biodiversity;
- Local, regional and national umbrella groups;

5. **WHAT TYPE OF FUNDING IS AVAILABLE?**

Proposals will be considered by the Environmental Management Fund Committee. This is an independent body established by Central Plains Water. The Committee may make a partial or full allocation dependant on their assessment.

6. WHAT TYPE OF PROJECTS ARE ELIGIBLE FOR FUNDING?

Proposals will be judged on the extent to which they will contribute to maintaining and enhancing environmental management. Consideration will be given to proposals that achieve some of the following outcomes:

- mitigation response to adverse environmental Scheme effects identified by the Ground and Surface Water Expert Review Panel;
- protect, enhance or restore native species, habitats, natural features, or historic or cultural heritage;
- improve sustainable land and water management;
- mitigate or remedy adverse environmental, social or cultural effects of the scheme construction or operation ;
- increase community understanding and involvement that contributes to sustainable management and healthy resources;
- promote information/knowledge exchange of the natural management of rural communities;
- complement landowner contributions and leverage contributions from other sources.

7. HOW DO I APPLY TO THE ENVIRONMENT FUND?

You can now apply to the Trust Fund all year round. Proposals can be submitted electronically via email to the following address:

emf@cpwl.co.nz

Alternatively, hard copy Proposals can be posted to:

[Central Plains Water Ltd, PO Box 9424, Tower Junction, Christchurch 8149](#)

It is recommended that you contact Central Plains Water Limited before applying.

Proposals are to be submitted annually prior to 1st August.

8. HOW ARE APPLICATIONS ASSESSED?

It is expected that more proposals will be submitted than there is funding available. To ensure fairness and transparency, an assessment system is used to choose which projects are funded.

All applicants may be asked to be interviewed and/or the Committee may request a site visit to understand and assess the details of the proposal.

The Committee meets formally every six months. After proposals are assessed by the Committee, successful applicants will be notified within six weeks. The Committee reserves the right to accept or decline proposals with no rights of appeal or review.

9. IF YOU'RE SUCCESSFUL...

There are several requirements placed upon successful proposals. A funding agreement must be signed and the terms and any conditions contained therein must be complied with, such as reporting on the project outcomes and key results.

Application# :
Date open:
Date close:

CENTRAL PLAINS WATER
ENVIRONMENTAL MANAGEMENT FUND
PROPOSAL

1. Proposal

Title _____

Fund amount being applied for \$ _____ Total project \$ _____

This project contributes to:

- Mitigation response to adverse environmental Scheme effects identified by GSWERP
- Protect, enhance or restore native species, habitats, natural features, or historic or cultural heritage
- Improve sustainable land and water management
- Mitigate adverse environmental, social or cultural effects of the scheme construction or operation
- Increase community understanding and involvement that contributes to sustainable management and healthy resources
- Promote information/knowledge exchange of the natural management of rural communities
- Resource investigation and scientific study
- Complement landowner contributions and leverage contributions from other sources

2. Organization

Name _____

Address _____

Contact Person _____ Title _____

Phone Number (day) _____ (evening) _____ (mobile) _____

E-mail _____

Website (if applicable): _____

GST number, if registered: _____

Legal status of organization: (depending on the nature of your organization, it may be registered with the Companies Office, the Charities Commission or various other regulatory bodies – if this applies, please state the legal status of your organization and provide the registration number)

Does your organization have an umbrella organization? (if yes, please provide details of their legal status and registration):

3. Project Details

3.1 What is your intended project? (Provide a brief description of your project.)

3.2 How do you plan to complete the project? (What are the steps and/or activities you will undertake in carrying out your project?)

3.3 Why do you want to do it? (What environmental issue(s) or enhancement(s) will your project address?

How will the catchment environment benefit?)

3.5 Previous experience – has your organization undertaken other projects in the community or can you point to other activities that reflect your ability to complete the proposed project? If so, could you please provide a brief description of the project and show how it demonstrates the capacity of your organization.

Note: If you/your organization has no (or limited) relevant previous experience, preference will be given to proposals that have partnered with, or sought advice from, a relevant organization to ensure the success of this proposal.

3.6 Will you require licenses/permits/approvals to undertake this project? (If yes, please provide details of land ownership, written approval for access to private lands, licenses or permits required or obtained.) Please specify:

yes no

3.7 Have these already been granted?

yes no

3.8 Land (Please tick box indicating the information and you will be supplying the supporting information)

- 1. If you own the land the project is on; please send us a copy of the Certificate of Title as proof of ownership
- 2. If you lease the land; please send us a copy of the lease agreement with the owner that authorizes you to use the land
- 3. If you neither own or lease the land; please attach a copy of the agreement with the owner that authorizes you to use the land
- 4. If the Crown owns the land; please send a copy of the relevant Gazette notice
- 5. If the land is Maori Land; please send a copy of the relevant Maori Land Court order

4. Project Evaluation (Indicators/Measurement of Success)

It is very important that you establish clear results (goals) for your project as its success will be measured by how well these have been met. Based on the information provided in Section 3, what are the key results for your project and how will they be measured both during and after its completion?

4.1 Key results:

4.2 How will you measure them?

5. Project Timeframe

5.1 How long will your project take and when will your project be completed?

6. Other Funding Sources

Is your organization applying for or receiving other funding for this project? yes no

If yes, please list:

Fund	Amount requested	Approved/Declined/Pending
_____	_____	_____
_____	_____	_____
_____	_____	_____

7. Funding Information

Financial Summary		
Amount requested (exclude GST if you are registered)	\$	% of project costs
Your organization's contribution	\$	% of project costs
Other funding	\$	% of project costs
Total Project Income	\$	

Total project costs – EXCLUDE GST IF YOU ARE REGISTERED			
	#	Cost per unit	Sub Total
Materials to be purchased <i>(Provide quote)</i>			
		Sub total	

Materials supplied by your organization			
		Sub total	
Paid Workforce <i>(provide number of hours and hourly rate or salary)</i>			
		Sub total	
Volunteer Workforce <i>(value your volunteer workforce at \$15/hr for unskilled labour and \$50/hr for professional services)</i>			
		Sub total	
Other costs <i>(please list)</i>			
Total of your contribution (Grey boxes)			
Remainder of Costs (White Boxes)			
Total cost of project			
Any funding from other sources (Excluding GST if registered)			
Request from the MCEET	Exclude GST if registered		

8. Declaration and Consent Requirements

I/We hereby declare the information supplied in this proposal is correct. If the proposal is successful, I/we agree to provide an accountability report (an accountability form will be sent to us in due course by Central Plains Water Limited) stating that the money received has been spent on the service agreed. We also agree to participate in any funding audit of our organization conducted by Central Plains Water Limited.

I/We also consent to Central Plains Water Limited collecting and retaining the personal contact details of the persons listed in this application. I/We confirm I/we obtained the consent of the persons listed in this application to provide these details and I/we have the authority to commit the organization to this application. We acknowledge our right to have access to this information. The consent is given in accordance with the Privacy Act 1993.

Name: _____ **Name:** _____

Position held: _____ **Position held:** _____

Date: _____ **Date:** _____

Signature: _____ **Signature:** _____

NB: Before placing your completed proposal in an envelope please check you have answered all the required questions, gained all required signatures and that you have attached all supporting information. Failure to include all relevant supporting information will result in your proposal being deemed ineligible.

Additional information you might like to include:

- Location map
- Photos
- Project plans
- Letters of support
- Legal documents (deed or constitution)
- Any additional information

8. Sending Your Application

Send your Trust Fund Application to:

Central Plains Water Ltd, PO Box 9424, Tower Junction, Christchurch 8149

Or Email it to:

emf@cpwl.co.nz