



Central Plains Water

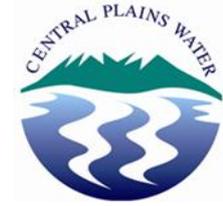
Nitrogen Allocation Strategy

29 April 2016



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1.0 Purpose

Two of the most frequently asked questions received from shareholders over recent years have been:

1. Will there be enough nitrogen allocation?
2. How will nitrogen be allocated?

Establishing a fair and appropriate Allocation Strategy has been long awaited and is of utmost importance to shareholders, particularly prior to proceeding with Stage 2+ of the Scheme.

The purpose of this Allocation Strategy is to:

1. Outline the objectives and principles that underpin the Allocation Strategy;
2. Advise shareholders of the Allocation Strategy and how it will be managed across each development stage of the Scheme;
3. Provide details of the application process and what to do if an eligible shareholder disagrees with the calculation of additional nitrogen required for the proposed new irrigated farming system; and
4. Provide details of the discharge consent (including the impact of being part of a non-CPW managed Farm Enterprise Group (FEG)).

The Allocation Strategy describes the process CPWL will use to equitably distribute nitrogen allocation to all eligible shareholders across the whole Scheme. The Allocation Strategy may need to change over time in order to take into account changes in law and/or district or regional plans and CPW's discharge consent. Any amendments will be communicated to all shareholders.

The nitrogen allocation and the discharge consent are held by CPWT. CPWT licenses the nitrogen allocation and the discharge consent to CPWL in the same manner as the other Scheme consents. CPWT and CPWL will be referred to collectively as "CPW".

2.0 Definitions

"CPW" means CPWL and/or CPWT.

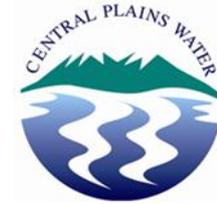
"CPWL" means Central Plains Water Limited.

"CPWL land" is land irrigated with CPW water.

"CPWT" means the Central Plains Water Trust.

"Existing Irrigation" means land that was irrigated prior to 1 Jan 2015.

"Farming Business" means all the properties utilised as part of a farm and which are included in a shareholder's FEP. This includes any support block, wintering block, dryland block etc that is utilised as part of any farm entity.



“FEG” means a Farm Environment Group that is not controlled or managed by CPW.

“FEP” means a farm environment plan.

“IGMP” means Industry-approved Good Management Practice as determined by the CPW discharge consent, or any updates or variations thereof.

“New Irrigation” means land that was not irrigated (other than by effluent) prior to 1 January 2015 (this includes the unirrigated areas of partially irrigated properties). Land which has been intensified by the Waimakariri A Users will also be treated as new irrigation as this change in land use was only permitted by Environment Canterbury on the basis that they would have a right to use some of CPW’s additional nitrogen allocation.

“Scheme” means the water enhancement scheme providing surface water for community irrigation on the central plains of Canterbury.

“Suitably Qualified Person” means a person that holds a Certificate of Completion in Advanced Sustainable Nutrient Management in New Zealand Agriculture from Massey University.

“Variation 1” means Variation 1 to the proposed Canterbury Land and Water Regional Plan.

“Waimakariri A Users” means those shareholders with a sub-licence of Waimakariri A water pending the development of the Sheffield Scheme.

3.0 CPWL Nitrogen Allocation Objectives

3.1 Key Issues

In establishing this Allocation Strategy several key issues were considered:

- The nitrogen allocation provided to CPW under Variation 1 only applies to new irrigation;
- Surety for farmers for investment purposes, including Stage 2+ proceeding;
- Fairness/Equity for all shareholders to the greatest extent possible;
- More hectares irrigated under the Scheme will reduce the annual charge for all shareholders;
- Accountability for nitrogen allocation and use;
- Retaining options for future intensification via a genuine phased conversion plan; and
- The need to safeguard nitrogen allocation for the last stages of the Scheme.

These considerations, in conjunction with comments and feedback received from shareholders, gave rise to two possible allocation strategies. These options are summarised in Figure 1 Allocation Options.

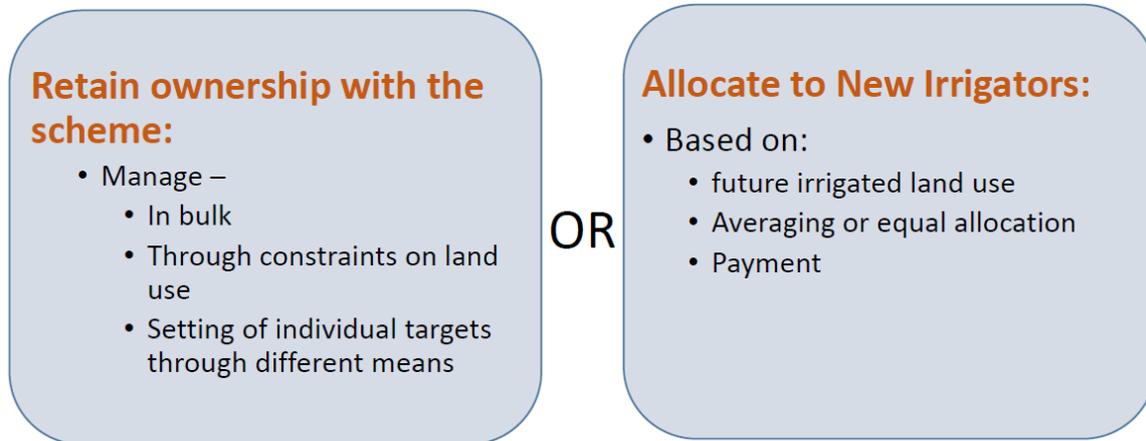


Figure 1 Allocation Options

3.2 Key Principles for managing CPW's Nitrogen Allocation

The nitrogen allocation provided to CPW under Variation 1 is to enable CPW to develop new irrigation, not to intensify existing irrigated land use.

In recognition of this, and to ensure equitable access to the available allocation, the CPWL Board have developed four founding principles upon which this Allocation Strategy has been developed:

1. Nitrogen allocated under Variation 1 is retained by CPW as a Scheme asset;
2. CPW seeks to enable as much new irrigation as possible. This means that shareholders will be allocated rights to use (not own) the nitrogen required and no more;
3. CPW will manage adjustments to nitrogen sublicenses for all shareholders (other than members of a FEG) under CPW's discharge consent to achieve the required percentage reductions to meet 2017, 2022 and beyond targets established for the Selwyn Waihora Zone; and
4. Nitrogen 'trading' is not permitted¹ (includes new sublicense and existing baselines).

Given that the Scheme's annual charge is highly dependent upon maximising the Scheme irrigation area, the allocation strategy must support developing the Scheme to its full potential. This will benefit existing and new irrigators, irrespective of any individual's sublicense of CPW's nitrogen allocation.

In addition, this will give maximum flexibility for the Scheme and the individual shareholder.

¹ If a shareholder is part of a FEG they can manage the (re-) distribution of nitrogen across the land within that FEG. If a new irrigator becomes a member of a FEG that part of the land which receives nitrogen allocation from the Scheme (note: Scheme allocation **includes** the baseline for that land) will be covered by CPW's discharge consent and will need to provide the same information and reporting as other shareholders under that consent. Any sublicense of nitrogen from CPW will only apply to the relevant property and cannot be redistributed across the land within the FEG. Existing irrigators who are members of FEGs will not be covered by CPW's discharge consent and will need to obtain and manage compliance with their own consent. In addition, they will need to provide CPW with their FEP and comply with the obligations set out in their water use agreement.



4.0 Discharge Consent

CPW irrigators' nitrogen losses are authorised under the CPW consents. The discharge consent aligns with this Allocation Strategy and enables CPW to manage all nitrogen losses across the Scheme including reductions up to 2037. This includes a shareholder's entire property, even if it is only partially irrigated, provided it is included in their FEP. By contrast, any nitrogen losses not associated with the Scheme will require individual consent. Any shareholder who is part of a FEG will not be covered by CPW's discharge consent.

The discharge consent incorporates sufficient flexibility to ensure that all nitrogen losses can be managed and reported at both individual farm and whole of Scheme levels.

Environment Canterbury has also recognized that the 979t recorded in Table 11(j) of Variation 1 is calculated using Overseer® version 6.1.3. This consideration is incorporated into the discharge consent to enable CPW to adapt to any changes as later versions of Overseer® are released. In this manner, the nitrogen allocation will move to reflect any changes to the Overseer® model. Any movements in the Overseer® model will be reconciled back to the allocation in Variation 1 calculated using Overseer® version 6.1.3.

In addition, Environment Canterbury anticipate that by 2017 there will be a clear understanding and communication of Good Management Practice (GMP) and Improved GMP (IGMP). This is summarised in Figure 2 New Discharge Consent.

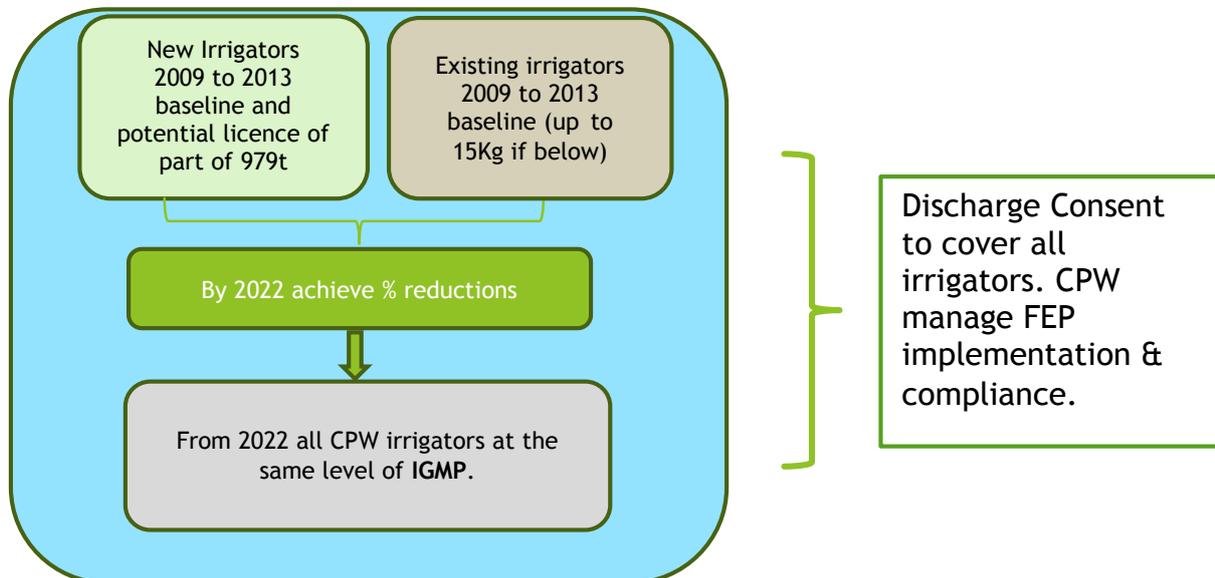


Figure 2 Discharge Consent

4.1 Industry-approved Good Management Practice (calculated using Overseer®)

Industry-approved Good Management Practice (IGMP) is a concept introduced under Variation 1 as a means to manage and reduce nutrient losses over time. IGMP is defined in the discharge consent, and provides a framework of good farm management



practices/standards to minimize nitrogen loss below the root zone, that farms across the whole Selwyn Te Waihora Zone are required to achieve by 1 January 2017. From 1 January 2017 farmers will be required to achieve further percentage reductions in nitrogen loss on their farms in line with CPW's discharge consent by 1st January 2022 (which are consistent with the reductions required by the Selwyn Te Waihora Sub regional Plan),

Accordingly, IGMP principles (and further percentage reductions in nitrogen loss) will apply to all shareholders, both existing and new irrigators to align with CPW discharge consent. The only difference is that existing irrigated properties are not able to increase nitrogen loss beyond their 2009-2013 baseline. Sublicensing of additional nitrogen to shareholders is guided by IGMP (calculated using Overseer®) to set an upper limit of allocation per property.

5.0 Nitrogen Allocation Strategy

5.1 Key principles

- CPW's nitrogen allocation under Variation 1 will be held by CPWT and licensed to CPWL.
- CPWL will sublicense its nitrogen allocation to "new" irrigators based on an assessment of the difference between their existing 2009-2013 dryland nitrogen baseline for their Farming Business and the proposed nitrogen loss demand for their proposed Farming Business within the limits of IGMP (i.e. the amount sublicensed will be the amount required for the proposed Farming Business within the limits of IGMP calculated using Overseer®).
- New irrigation is:
 - land that was not irrigated (other than by effluent) prior to 1 January 2015 (this includes the unirrigated areas of partially irrigated properties); and
 - land that was intensified by shareholders as a result of their sub-licence of Waimakariri A water pending development of the Sheffield Scheme and which received a right to use some of CPW's additional nitrogen allocation in advance.
- Shareholders intending to irrigate their dryland property will need to apply to CPWL for a sublicense for additional nitrogen no later than 6 months after becoming a construction shareholder (or having equivalent rights to using the Scheme infrastructure) in accordance with the application process outlined below.
- A nitrogen sublicense is available to new irrigators for so long as they remain in the Scheme. In addition, if a shareholder is part of a FEG the sublicense will only be available for the relevant property and cannot be redistributed across the land within the FEG. Waimakariri A Users will retain their nitrogen sublicense only if they continue to irrigate with CPW water as part of the Scheme and may also be eligible for an additional nitrogen sublicense under the phased sublicense rules.
- CPWL has apportioned CPW's nitrogen allocation pro rata to each stage of the Scheme based on the estimated dryland area and at a rate of 36.2kgN/ha/yr (Overseer® 6.1.3). If the nitrogen apportionment for any stage is exceeded CPWL



may reduce the additional nitrogen allocation sublicensed to shareholders within that stage on a pro rata basis. CPWL will notify shareholders as soon as reasonably practicable if this situation occurs.

- Allocation of nitrogen sublicenses to new irrigators will be guided by IGMP (calculated using Overseer®) which will set the upper limit of the sublicense for each property.
- The nitrogen sublicensed to shareholders will reduce over time to meet the regulatory nitrogen targets set for 2017, 2022 and 2037 and the terms of CPW's discharge consent. New irrigators may change their farming systems from time to time provided they do so within those limits. CPW will manage future percentage reductions in nitrogen across all shareholders (existing irrigators and new irrigators). This process will be managed under CPW's discharge consent.
- New irrigators will have 5 years from the time CPW makes irrigation water available to the relevant land to achieve full development. At the end of the 5 year period, if the property has not been intensified to the extent planned, the balance of the additional nitrogen licence will no longer be available to that property. Water user charges will apply from the date irrigation water is available to the relevant land.
- Depending on the regulatory environment and the ability to demonstrate reductions in nitrogen losses over time, if any of CPW's nitrogen allocation is not fully sublicensed under the above process it may be available at a later point for new irrigators.

5.2 Application Process

An eligible shareholder wanting to be licensed additional nitrogen must apply in writing to CPWL no later than 6 months after becoming a construction shareholder (or having equivalent rights to using the Scheme infrastructure).

This application must include:

1. The area of the Farming Business that was not irrigated prior to 1 January 2015;
2. The area of the Farming Business that was irrigated prior to 1 January 2015 (if relevant);
3. The existing 2009-2013 nitrogen baseline (xml file format or equivalent model approved by the Chief Executive of Environment Canterbury) for the Farming Business (both dry and irrigated land) (prepared by a Suitably Qualified Person);
4. A nitrogen loss model (xml file format or equivalent model approved by the Chief Executive of Environment Canterbury) for the proposed irrigated farming system (prepared by a Suitably Qualified Person) (including, if relevant, any stages taken to develop fully); and
5. A reasonable timeframe to achieve full development, which must not exceed 5 years from the time CPWL makes irrigation water available to the land to which the sublicense applies.

If there is a deficit between the existing dryland baseline and the proposed irrigated land use, CPWL will provide a sublicense to use sufficient nitrogen for the proposed irrigated land



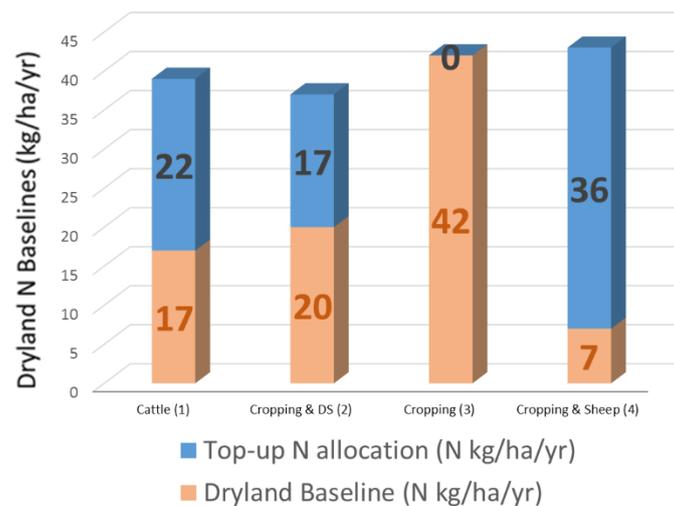
use (within the limits of IGMP). If the nitrogen baseline exceeds the proposed land use no sublicense for additional nitrogen will be provided.

If the nitrogen apportionment for any development stage is exceeded CPWL may reduce the sublicenses for additional nitrogen allocation provided to shareholders within that stage on a pro rata basis.

If a shareholder disagrees with the calculation of the amount of additional nitrogen under this process they should contact CPWL in writing detailing their concerns. CPWL will then meet with the shareholder to discuss the concerns which may require the shareholder to provide further information/justification.

5.3 Examples

Figure 3 Dryland Baselines and CPWL ‘Top-up’ illustrates how this Allocation Strategy applies to new irrigation. There are no examples for existing irrigation as those shareholders are limited to their 2009-2013 nitrogen baseline.



<p>1. New irrigation</p> <p>CPWL provide a sublicense for the additional nitrogen and new water.</p>	<p>Existing</p> <p>Dryland Baseline</p> <p>17kg/ha/yr</p>	<p>Proposal</p> <p>New Irrigated Land use</p> <p>39kg/ha/yr</p>	<p>Allocation</p> <p>CPW provide water and 39kg/ha/yr sublicense</p>
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<p>2. New irrigation</p> <p>CPWL provide a sublicense for the additional nitrogen and new water.</p>	<p>Existing</p> <p>Dryland Baseline 20kg/ha/yr</p>	<p>Proposal</p> <p>New Irrigated Land use 37kg/ha/yr</p>	<p>Allocation</p> <p>CPW provide water and 37kg/ha/yr sublicense</p>
<p>3. New irrigation</p> <p>CPWL provides water only. No sublicense for additional nitrogen required.</p>	<p>Existing</p> <p>Dryland Baseline 42kg/ha/yr</p>	<p>Proposal</p> <p>New Irrigated Land use 42kg/ha/yr</p>	<p>Allocation</p> <p>CPW provide water. No sublicense required</p>
<p>4. New irrigation</p> <p>CPWL provide a sublicense for the additional nitrogen and new water.</p>	<p>Existing</p> <p>Dryland baseline 7kg/ha/yr</p>	<p>Proposal</p> <p>New Irrigated land use 43kg/ha/yr</p>	<p>Allocation</p> <p>CPW provide water and 43kg/ha/yr sublicense</p>

Figure 3 Dryland Baselines and CPWL 'Top-up'

5.4 Nitrogen Allocation for Future Stages

CPWL has assigned a portion of the nitrogen allocation to Stage 1 and the potential future stages of the Scheme. This is illustrated in Figure 4 Scheme N Allocation by Stage.

The apportionment of nitrogen to each stage has been based on available information and takes into consideration the total dryland hectares (including partially irrigated land - as modelled from an assessment of existing operative consents). An average nitrogen allocation of 36.2 kg N/ha/yr (Overseer® 6.1.3) has been allowed across modelled dryland for each stage. The delineation of the stages is based on the stages of the Scheme set out below but will change over time as the design(s) for the next stage(s) of the Scheme are further developed and as shareholder uptake is confirmed. As such, the boundaries of each stage and the relative tonnes of nitrogen apportioned to each stage may change, but the average apportionment of nitrogen per dryland hectare will remain consistent across the Scheme.

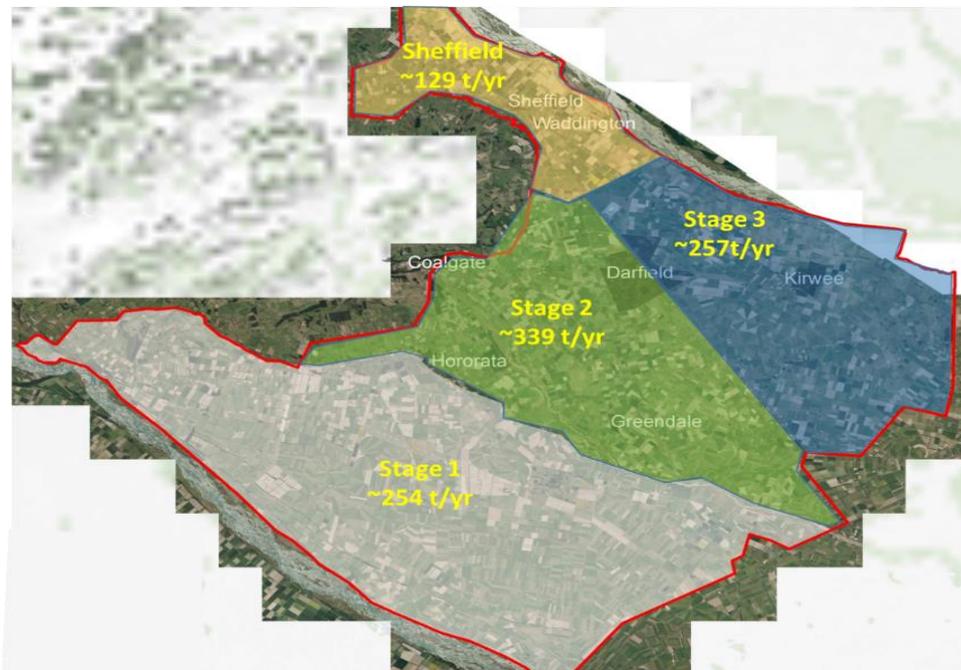


Figure 4 Scheme N Allocation by Stage

6.0 Questions & Answers

(a) What does this mean for existing irrigators?

Variation 1 specifically states that CPW's additional nitrogen allocation is only available for 'new' irrigation (i.e. land that was not irrigated (other than by effluent) prior to 1 January 2015), therefore existing irrigators must operate within their existing 2009-2013 nitrogen baseline. They will follow IGMP and CPWL will assist with developing FEPs and manage all aspects of compliance reporting (provided they are not part of a FEG).

Existing irrigation also includes areas of properties which were irrigated prior to 1 January 2015 where the application rate is less than 'efficient irrigation'. Typically, Environment Canterbury considers an application rate of ~5mm to represent 'efficient irrigation'

Provided they are not part of a FEG, existing CPWL irrigators will not have to obtain an individual discharge consent and will be covered by CPW's discharge consent and CPW will assist with the management of FEP implementation, auditing and reporting.

(b) Why aren't existing irrigators operating with less than 'efficient irrigation' prior to 1 January 2015 eligible for CPW's nitrogen allocation?

Variation 1 specifically states that CPW's additional nitrogen allocation is only available for new irrigation (i.e. land that was not irrigated (other than by effluent) prior to 1 January 2015).



CPWL has also undertaken modelling using Overseer® which demonstrates there is no increase in nitrogen losses from a property that increases (via traveler and pivot irrigation systems) the application rate up to ~5mm. This is because Overseer® assumes good management practice is undertaken i.e. that irrigation application is managed to avoid leaching.

CPWL can enable efficient irrigation with additional water but is not able to provide a sublicense for additional nitrogen to the property. This means that the Farming Business will need to operate within its existing 2009-2013 nitrogen baseline.

(c) What if a shareholder isn't changing their Farming Business immediately but wants to preserve future options?

If a shareholder intends to intensify their farm system via CPW irrigation they must apply to CPWL for a sublicense within 6 months of becoming a construction shareholder (or having equivalent rights to using the Scheme infrastructure). They may opt to phase the implementation of their intensified irrigated system over a maximum period of 5 years from the time CPWL makes irrigation water available to the relevant land. Water use charges will apply from the date irrigation water is available to the relevant land. Through the FEP audit process CPWL will monitor implementation of the intensified farm system against the available nitrogen allocation. At the end of the 5 year period, if the property has not been intensified to the extent planned, the balance of the additional nitrogen sublicensed will no longer be available.

(d) Will there be nitrogen allocation available for the later stages of the Scheme?

CPWL has apportioned the nitrogen allocation for new irrigation pro rata to each stage of the Scheme to ensure that the nitrogen allocation is available for sublicensing to future stages as the Scheme develops.

This apportionment is based on the Scheme's development stages as set out in Figure 4 Scheme N Allocation by Stage. An average allocation of 36.2 kgN/ha/yr (Overseer® 6.1.3) has been allowed for the dryland within each stage. The boundaries of each stage are likely to change over time as the design(s) for the next stage(s) of the Scheme are further developed and uptake is confirmed.

The boundaries of each stage and the relative tonnes of nitrogen apportioned to each stage may change, but the average allocation per hectare will remain consistent across the Scheme.

(e) Who needs to obtain a discharge consent?

CPW irrigators' nitrogen losses on land included within their FEPs are authorised under CPW's consents (this can also include the non-irrigated areas of the property). CPWL will



manage the compliance obligations for this based on information received from shareholders' FEPs and the audit process.

This situation will be different if you are a member of a FEG. Refer to question (h) below for more details.

CPW's discharge consent aligns with CPW's Allocation Strategy and enables CPW to generally manage all nitrogen losses across the Scheme.

Any nitrogen losses not associated with the Scheme will require individual consent.

(f) What will happen to CPW's nitrogen allocation when new Overseer® versions are released?

Environment Canterbury has recognized that the 979t recorded in Variation 1 is calculated using version 6.1.3 of Overseer®. This will be incorporated into the discharge consent to enable CPW to adapt to any changes as later versions of Overseer® are released (i.e. CPW's nitrogen allocation will move with changes to the Overseer® model). Any movements in the Overseer® model will be reconciled back to the allocation in Variation 1 calculated using Overseer® version 6.1.3.

(g) What about Farm Enterprise Groups?

Variation 1 allows for one or more farmers to aggregate their properties and apply for consent to operate as a single unit for the purpose of nutrient management. However, CPW's discharge consent includes the same provisions and flexibility provided by a FEG.

If a new irrigator becomes a member of a FEG (note: "FEG" means a Farm Environment Group that is **not** controlled or managed by CPW) that part of the land which receives new irrigation from the Scheme will be covered by CPW's discharge consent and will need to provide the same information and reporting as other shareholders under that consent. A sublicense of nitrogen from CPW to a member of a FEG will only be made to the relevant property and cannot be redistributed across the land within the FEG.

If an existing irrigator becomes part of a FEG they will not be covered by CPW's discharge consent and will need to obtain and manage compliance with their own consent. In addition, they will need to provide CPW with their FEP and comply with the obligations set out in their water use agreement.

(h) How confident can new irrigators be that the nitrogen allocation will remain available?

CPWL has assessed the extent of existing dry land within the Scheme area based on operative irrigation consents and have confirmed that there is 27,000ha of dryland that is potentially eligible for a sublicense of CPW's nitrogen allocation. To safeguard this for all shareholders CPWL has apportioned the nitrogen allocation based on 36.2 kg/Ha/yr (Overseer® 6.1.3) to each stage. Sublicenses will be limited per property by IGMP which will set the upper limit for each property.



Appendix 1: Background Information

(1) Planning Framework

On 25th July 2012 Central Plains Water Trust (CPWT²) was granted consents to take and use water from the Rakaia and Waimakariri Rivers, and to construct, operate and maintain the necessary infrastructure to irrigate 60,000ha within the Central Plains area. Central Plains Water Ltd (CPWL³) was established in 2003 to raise shareholder capital to fund the resource consent costs and implement the Central Plains Water Enhancement Scheme (the Scheme).

Shortly after the CPW consents were granted, the partly operative Canterbury Land and Water Regional Plan (LWRP) was notified. Within the LWRP a chapter was established for each Sub-region (Zone) to set specific targets to address each Zone's particular issues. The LWRP included policies and rules for reducing nitrogen losses to meet the requirements of the National Policy Statement for Freshwater (NPS), which requires Regional Councils to achieve time bound improvements to water quality.

The Scheme sits within the Selwyn/Waihora Zone, which has been identified as 'not currently achieving its freshwater objectives' and is therefore assessed as 'over allocated' in accordance with the NPS. A Zone Committee, constituting community and stakeholder representatives, led a process in the Selwyn/Waihora Zone to develop a set of aspirational outcomes for the Zone and Lake Ellesmere/Te Waihora.

This process identified a wide range of issues, which establish the aspirational outcomes for the Zone, including the need to:

- Reduce nitrogen leaching and phosphorus losses to improve water quality within Lake Ellesmere/Te Waihora and its tributary streams and rivers;
- Reduce the over allocation of groundwater; and
- Achieve ecological flows in lowland streams.

The Solutions Package (a combination of the Zone Implementation Plan (ZIP) and subsequent ZIP Addendum) developed through this process is intended to achieve these outcomes. Of the strategies included in the Solutions Package, most relevant to this document are the farm nutrient limits and the measures that were established to reduce nitrogen losses.

(2) Variation 1

The Hearing of the proposed Sub-regional Chapter of the LWRP for the Selwyn/Waihora Zone (Variation 1) ran between October and November 2014. As CPW was consented prior to the Hearings, the potential effects of the Scheme were considered as part of the existing environment. Importantly, the total modelled tonnage of nitrogen entering Lake Ellesmere/Te Waihora included the additional nitrogen that would be leached once CPW enabled the conversion of dryland to irrigation.

² CPWT was established in 2000 by the Christchurch City Council and the Selwyn District Council to obtain the Resource Consents for the Scheme. CPWT licences the Resource Consents required to construct, operate and maintain the Scheme to CPWL.

³ CPWT and CPWL will be referred to collectively as "CPW".



Variation 1 proposed a fixed allocation or ‘cap’ for nitrogen losses associated with the Scheme.

CPW was concerned about the accuracy of this proposed limit and established, from a detailed 40 farm study, that Environment Canterbury’s proposed limit underestimated the existing nitrogen baselines for both irrigated and dry land. Any inaccuracies in the calculation of CPW’s allocation could limit the ability for shareholders to establish new irrigation and for existing irrigators to operate under their existing farm models.

(3) Evidence-based Submission

To inform CPW’s submission on the cap proposed under Variation 1, CPW commissioned The Agribusiness Group Ltd to undertake a 40 farm study covering 12,000 hectares. This study surveyed 20 irrigated and 20 dryland shareholder properties across the Scheme command area, each category totaling approximately 6,000 hectares. The study identified that the baselines⁴ for both dryland and irrigated farms were generally higher than estimated by Environment Canterbury. Figure 3 below provides a summary of the Environment Canterbury assessment of nitrogen losses for CPW new irrigation.

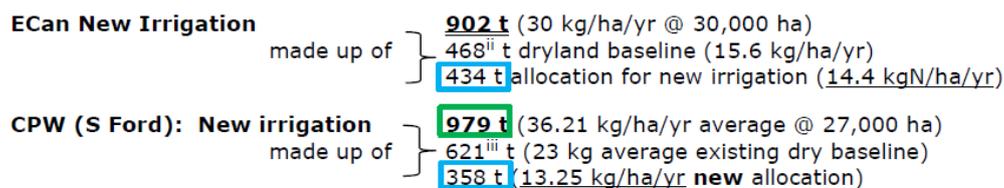


Fig. 4 Nitrogen Allocation Assessment - excerpt from ‘CPWL N Allocation Evidence’ presented at Var.1 Hearing

The key difference here is that between Environment Canterbury’s *estimated* existing dryland baseline and CPW’s *calculated* baseline derived from the 40 Farm Study. It was the information gathered through the Study that enabled CPW to present a sufficiently strong case at the Variation 1 Hearings to ensure that sufficient allocation was provided to enable the Scheme to provide for 27,000 hectares of new irrigation.

As a result, the modelled allocation of 979t of nitrogen for new CPW irrigation was adopted by the Hearing Decisions Panel. This is recorded in Table 11(j) of Variation 1.

(4) Managing Baselines and ‘New’ Allocation

As indicated in Figure 1, the 979 tonnes allocated to the Scheme includes an existing dryland nitrogen baseline load of 621 tonnes and a further 358t to enable new irrigation.

Understanding the existing dryland nitrogen baselines provided key evidence on which this Strategy has been developed.

The 40 Farm Study indicated that not all dryland baselines are ‘low’ so it is possible that the proposed new irrigated land use may be undertaken within a property’s existing dryland nitrogen baseline. This is illustrated in Figure 5 Dryland Baselines.

⁴ Existing nitrogen loss 2009-13, OR as at 2014 if a steady state farming system (i.e. one that has not changed in the 2009-13 period) as defined in Section 2.9 of the LWRP.

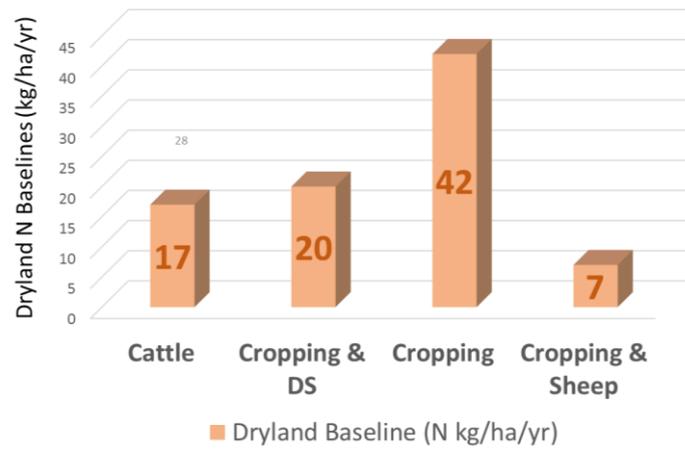


Fig. 5 Dryland Baselines

The allocation provided for the Scheme in Table 11(j) of Variation 1 does not specify how, where, or under what land use activity the allocation must be utilized. This provides CPW the flexibility to manage land use within an allocation limit rather than being restricted to specified land use activities across the Scheme.