

IN THE MATTER

of the Resource Management Act 1991
("the Act")

AND

IN THE MATTER

of applications by the Central Plains
Water Trust (CPWT) and the Ashburton
Community Water Trust (ACWT)

Statement of Evidence of Barry Mathers

INTRODUCTION

1. My name is Barry Mathers. I live on a four-acre block on the edge of Coalgate with my family. We have lived in Coalgate for the last eight years.
2. Prior to moving to Coalgate we lived in suburban Linwood. From the time that my wife and I met some twenty three years ago, we held dreams of owning a smallholding where we could raise a family, grow most of our own food organically and be part of a supportive community. We hunted for a long time to find "the right place". We were looking for somewhere peaceful, next to a river, with good soils that had not been contaminated with chemicals and had its own well with clean pure water (low nitrate and contaminant levels). We wanted land close to the hills with good rainfall. We wanted a place with a sense of history and community. We were idealistic but optimistic!



Growing good organic food



Goats to provide milk

3. Community has always been important for us. Wherever we have been we have been active in the community in some form or other. A concern for us in moving to a rural area was how the locals would treat a couple of white educated townies who were fairly green minded to boot. There was no way to assess this without actually living in the area. So we took the plunge... We need not have worried. Coalgate, Glentunnel and Whitecliffs have proved to be packed with very interesting people with a wide range of views. We now have a great circle of supportive friends and feel to be part of the community.



Front entrance to home

4. I have served four years on the Coalgate Township Committee and seven and a half on the Malvern Hills Protection Society (formerly the Dam Action Group). I am currently the chair of the latter.
5. We spent some six months negotiating the purchase of our property blissfully unaware that plans were being hatched by others to change the face of farming in the area, dissect the plains with huge canals and build a dam of frightening proportions just up the valley. The peaceful

rural atmosphere we had sought for so long was not to last. But as we signed for our dream we were not to know that.

6. Coalgate and its environment had the qualities we were looking for (see para 2), and being able to purchase the old police station (1876) complete with jail just topped it off for us.



The jail house 1876

7. I am a professional forester holding a degree in Forestry Science and a second Science degree majoring in Chemistry. Almost all of my professional working life has been spent focussed on the land located between the Clarence River to the north and the Rangitata River to the south. Six and a half years ago I established Cabbage Tree Forestry Limited and began working in my own right. Approximately half of my work involves riparian restoration and erosion control work for Environment Canterbury. The balance of my work is with alternative timber species. I run a small nursery from home and a timber-drying kiln producing tongue and groove flooring.



Riparian river works



The tree nursery



Kiln drying eucalyptus for flooring

8. Our house and property (4acres) is located 1 km from the proposed dam located on the other side of Coalgate. We will be living within close proximity to the construction site, which will, I expect, become a pseudo permanent activity over the next 3-4 years. The "level headrace" passes within 25m of our property on the other side of the road. CPW maps show part of our property to be in the "designated pink zone".



The view up hill to the foot of the dam from the front of our house

9. The CPW proposal has already caused a great deal of strife and division in the community. Difference of opinion between neighbours, between brothers and sisters, between husband and wife, between businesses, between friends, between those who stand to gain and those who stand to lose. Our community has already lost out as a result of this proposal. The granting of these consents, allowing the building of this scheme, will give physical basis to the division.
10. In order to simplify my thinking about the likely impacts of the scheme I have notionally separated the effects into three categories:- Effects which have already occurred (see para 9), effects which result from the construction process and finally effects which result from operation of the scheme. Some of these may be temporary and / or reversible over time but many would not.
11. My statement of evidence is intended to point out the manner, in which the scheme has and could affect my life and that of my family. Further, it is intended to point out some of what I consider to be short comings of the application and the scheme.
12. I believe that the Notice of Requirement and resource consents sought for the proposed CPW scheme will result in a significant adverse effect on my family, the town of Coalgate and the larger environment of the Canterbury Plains.
13. I submit that the Notice of Requirement and all associated resource consents are declined.

PERSONAL EFFECTS

14. A large proportion of my personal time over the last 6 years has been used up trying to come to grips with this proposal. Details of the physical dimensions of the scheme, the legal position and the economic viability of the scheme have been difficult to obtain, sketchy and constantly changing. This has created a burden on my family and me and is a cost which is a direct result of this proposal.
15. Due to the close proximity of my house to the dam, all construction works associated with the dam and tunnel will impact on my peaceful enjoyment of Coalgate. Furthermore, I spend considerable time in the environment surrounding Coalgate and on the Canterbury Plains. Construction activities in these areas, as a result of canals and water distribution networks, will further adversely interfere with my peaceful enjoyment of this area. Considering the length of time construction is expected to take, I expect that this effect on my peaceful enjoyment will be long term. I understand the consents sought are for a term of 35 years despite undertakings that the construction phase would only be temporary in nature.
16. I am concerned with the increase in traffic as a result of the scheme being granted consent to. The volume of traffic on the road will increase both during the construction phase and on completion. An increase in gravel trucks and milk tankers thundering past my gate will be an adverse effect on me.
17. I am also concerned about the level of dust that will be created both during the construction phase and once the scheme is operational.
18. I anticipate that there will be an adverse environmental impact on me in terms of smell as a result of the proposal. Fluctuating water levels in the dam will expose mud flats and vegetation resulting in adverse odours. Due to my close proximity to the dam I expect that such unwanted smells will be a common occurrence. Additionally, I do not like the change in smell that occurs as conventional farming converts to dairying, as will surely happen as a result of this scheme.
19. As my home is located within 1 kilometre of the dam construction site and the Harper Hills ridge lies to the other side any noise above the normal level will reach me and then echo back off the ridge giving me a double dose of noise. I am alarmed to see that the noise levels proposed from blasting, pile driving and heavy machinery will exceed those allowable under the District Plan and further that the construction sites that these noises will emanate from, will operate 24 hours per day and 7 days per week. I understand from this that not only will my daytime peace be disturbed but my sleep is also likely to be disrupted by low rumbling noises and loud bangs, clangs and thumping noises. If the applicant builds a pump station at the base of the dam to pump

water into the reservoir over the face of the dam, noise from the pump will likely reflect off the dam and further disturb my peace and sleep. I cannot be convinced that a pump capable of shifting 40 odd cubic meters of water per second up a 55m high slope will make noise which could be described as “less than minor”.

20. I am concerned about the construction of the level head race embankments around the village. I understand these will vary in height from 6 to 10 meters depending on topography. If this is the case they will form an embankment encircling the lower half of the village that will form an effective dam in the event of copious volumes of water coming from the main reservoir in the event of a dam breach. This would trap floodwaters within the village. The dam breach assessment provided by CPW notes that water levels at my house would be in excess of six meters. I only imagined a great woosh of water not trapped water backing up for days. I do not find this situation in any manner acceptable. The only practical way to avoid this effect would be to pipe the length of headrace around the village or to push the level head race down the plains far enough to avoid any pond of water affecting the village.

21. As a forester, one of the special features of this area that I enjoy is the “English deciduous hardwood forest” on Scott’s ridge. This forest type which is relatively rare in Canterbury will be removed and replaced with a grey gravel bank 2 km long and 55m high. I drive past this forest every day and will miss the aesthetic and intrinsic values it provides. This particular forest also has historic / heritage value being linked to the Deans property in Riccarton and ultimately their and my ancestral home of Scotland.



English deciduous forest

22. My house is located downhill of the proposed dam structure. The applicant has provided dam failure maps which shows that the path of water (should the dam fail) will completely cover the house my wife, children and I live in and the whole of our property to a depth “in

excess of six meters". The applicant claims that the risk of failure is "infinitesimally small" and not worth worrying about. However, I submit that even if the risk is small, there is in fact still an additional risk which would be imposed. I am aware that the applicant considers this risk to be less than that of smoking or driving a car. In the case of the former I choose not to indulge and the latter I can take risk avoidance measures such as defensive driving courses etc. I am also aware that if the dam did burst my family's chances of survival would be equally "infinitesimally small". There is a psychological pressure involved in the knowledge that so many millions of tonnes of water is or could be located directly above my home. This is an unwelcome and unnecessary stress.

23. Since moving to Coalgate we have felt two earthquakes, both relatively small. The Valley is also home to at least one earthquake fault line (responsible for ousting the proposed regional tip from the Valley) and possibly many more unidentified ones. General agreement among geologists is that the main Divide is long overdue for a major shake up. A fact that has been publicised in "The Press" a disturbing number of times since the proposal has come to light. None of these facts gives any confidence to those of us who will live below the proposed dam.

24. I have been advised that the designation that the applicant has applied for is now notified on the Land Information Memorandum for my property and that of all other property owners within the scheme area (beneficiary or otherwise). This will impact on both the value of my property and my ability to sell should I wish to do so. While it is important that any prospective buyers to the area are aware of the proposal before making any decision, I feel that this represents an invasion or infringement of my personal affairs.

25. One of the delightful aspects of living where we do is the amount of public land easily available to recreate on. As well as the Waikirikiri with its swimming holes and paddling areas we are blessed by living adjacent to the Schools endowment plantation. This is an area that my children have spent countless hours playing all manner of make believe games, building stick huts and playing Pooh sticks in the water race. Another area of use is the Coalgate reserve. This is an area of about 15ha was set aside by some visionaries of past generations and held as reserve for the township. The bulk of this area has been planted in forest, through which a path meanders. My children and I have visited this special space regularly to exercise our dogs. It represents one of the few areas where children and dogs can run wild and be completely safe from traffic (the reserve is at the end of a dead end street). Although we are not horse people we commonly meet people riding their horses in the reserve, probably for the same traffic free reason we go there with our dogs. Several of the CPW maps show the area of designation crossing the reserve to allow for the level head race but do not specifically show the location of the head race. Last time I was there I tried to imagine how it would feel to have a vast canal

crossing the reserve. I started to feel angry that this public space, free for all, would be curtailed for the benefit of the few, none of who probably are even aware that the reserve exists. The thought of having an embankment of 6 to 10 meters towering over the site rattled my nerves. Gone is the freedom for the children and the dogs to run wild, there would be a water danger in their play park of a scale quite different to that posed by a water race or the Waikirikiri. Visually it is a broad open space to enjoy. As the trees grow this will change but it will remain appropriate for children to play in. The embankment represents a distinct solid visual barrier both imposing in itself and obscuring the views across adjacent farmland.

SPECIFIC EFFECTS ON THE SELWYN RIVER

26. Our family lives near the Selwyn River. It is a treasure of a river for recreation and just to observe. Within one kilometre of our home the Selwyn River disappears or submerges into the plains to feed the aquifer and reappear to the east of the Main South Road. During the winter when river flows are higher some water travels overland in the manner of a normal river. I believe that to extract large volumes of water from both of the bigger rivers and dump it on the plains above the aquifer and surrounding the Selwyn River could disrupt this special overland feature of the river.



Waikirikiri where my children play

GENERAL EFFECTS

27. I am concerned at the area of land that will be removed from production to facilitate the reservoir, dam wall, level headrace canals and water distribution canals. I understand that something in the order of 2700 ha of usable land will be lost, the majority of which is considered at least moderately productive.

28. This scheme is premised on supply of water to farms at a high water usage level per hectare with a high degree of reliability. This is largely

driven by the needs of the dairy industry as opposed to the existing sheep and cropping industries, which require less water per hectare over a shorter period of time. The net result is that vast amounts of water need to be extracted from the two rivers and vast storage is required. This results in an expensive scheme with high up front costs and high annual costs, which not surprisingly can only be afforded by the dairy industry (CPW documentation). I do not feel that this is the type of scheme that will best serve the needs of the current farming community and imposes unnecessarily large negative affects on the environment and the wider community.

29. By maximising the scale of the take, supply and storage facility, the per hectare cost to the business community and the environmental and social costs borne by the whole community are maximised. This approach limits the use of water to those uses by the business community most able to afford it. The applicants own information informs me that this is likely to be limited to the dairy and dairy support industries, which in turn are known to be unsavoury from an environmental and social point of view. It is my contention that a scheme of a considerably smaller scale would be more affordable to a wider range of agricultural endeavour with lesser environmental and social impacts. While a smaller scheme may appear more affordable to the dairy and dairy support industries it would not be able to supply the higher levels of water use nor the level of reliability these industries demand. This inability of the smaller scheme to supply the dairy and dairy support industries has the positive impact of reducing the unsavoury environmental and social impacts that follow that industry. While a smaller scheme may not maximise the potential profit of the applicant, it could be of more benefit to the business community and of less cost to the community as a whole.

30. I understand that in other areas where large scale high water use schemes have started up that a very large percentage of family farms have sold out within a short timeframe. Furthermore, many of these family farms end up aggregated into much larger landholdings to be operated in a corporate manner. I am concerned about the loss of the family farm and the longstanding culture that goes with it. As corporate farming enters the scene it brings with it a new culture. This culture tends to put short-term shareholder return at the top of the priority list while other issues, such as land use sustainability, animal welfare, aesthetics, environmental issues, and social responsibility are not prioritised. Corporate enterprises also internalise benefits and externalise costs wherever possible, thereby maximising profits. The down side of this practice is that the externalised costs all too often fall on the community at large. Because corporations tend to have these side effects I am opposed to any mechanism, such as large-scale high water use irrigation schemes, which facilitate the loss of the family farm.

31. The granting of these consents and designations will effectively hand the power to impose the social changes (para 28) on the host communities without any accountability and no mandate from the communities so affected. To hand this sort of power over to a small group of individuals, squarely focussed on the profit motive at the expense of all else, is wrong and a perversion of democracy.
32. Granting of this application will allow intensive farming such as dairying to proliferate within the scheme area. The applicant aims to increase the current 22,000 ha of dairying to 46,500 ha on the plains. ECan information is clear that the nitrate and other pollutants, chemical and biological, within the aquifers underlying the scheme area are already increasing from historical low intensity farming. The contamination wave from existing intensive farming has not yet reached the deeper aquifers but is predicted to do so in the foreseeable future. It would seem to be irresponsible to risk any increase in activity that is known to cause such contamination. Our aquifer is a precious resource that must be protected for our future use and that of future generations. To compromise it could only be described as folly and would be against the principle of sustainable resource usage. I understand that such contamination is not totally irreversible but that the time periods involved are extremely long.
33. The likely increase in dairy cow numbers will also result in a large contribution of so called "greenhouse gasses" to the atmosphere. I view this contribution as being negative in two respects. First, the negative environmental (and hence economic and social) impact of climate change, and secondly the negative contribution toward New Zealand's financial obligations under the Kyoto agreement which in turn will be picked up by all tax payers. In both cases the burden is spread over the whole community rather than the water using business community. Further, even if the financial costs were picked by the business community the effects would be felt by all.
34. I am concerned that the scheme has already and will result in future considerable (largely hidden) expenditure by the Selwyn District Council both during and post construction which will end up being paid for by the ratepayer who may or may not be a beneficiary of the scheme. I do not believe that this is just nor do I believe that the "trickle down" of the much touted economic benefits will in any way compensate for this subsidy to the shareholders of Central Plains Water Limited.
35. The AEE and other documentation provided by the applicant amounts to quite an impressive volume of literature. However, on closer reading I find the quality of the material to be very superficial. In particular, negative effects appear to be dealt with in one of four ways:
 - a. Not identified at all;

- b. Identified but verbally minimised to the extent that they become irrelevant;
- c. Identified but ignored; or
- d. Identified and the effect supposedly mitigated through an environmental management plan which is not available for my inspection.

I do not feel that the applicant has made an honest judgement of the true effects and then avoided, remedied and mitigated as mandated under the Resource Management Act 1991.

36. It is proposed that the negative environmental effects of supply of water to the Shareholders of Central Plains Water Limited would be curtailed through the use of an environmental code of conduct. I understand that this code would be a condition of supply of water to the end user. However, I also understand that a condition within the code is that compliance with the code does not affect the economic operation of the business. This gives both the end user and CPWL a loophole to avoid environmental responsibility as any environmental issues which require any expenditure will affect the economic operation of the business.
37. Central Plains Water Limited has an exclusive arrangement with the applicant for the use of the consents should they be granted. The shareholders of this company are the only people who will benefit directly from this scheme, yet there are a great many properties which must be sacrificed for the reservoir and many more through which the various canals pass who do not benefit from the scheme. Indeed many of these properties will be somewhat disadvantaged both through physical structures and potentially increased rates. The concept that the scheme should proceed for the benefit of some at the expense of others is not morally correct.
38. The scheme has been promoted as a storage scheme harvesting flood and high waters. On reading the AEE I find that the storage component of the scheme, although huge in size, is only minor in proportion, i.e. the bulk of the water will come directly from the rivers, not at flood or high waters but at medium waters right down to the minimum flow. I believe that this is referred to as "flat lining". While I would support the concept of harvesting of floodwaters I cannot abide by "flat lining" and certainly cannot abide by misrepresentation of the facts to the public. See appendix A
39. I understand the water sought represents the last available water in both the Waimakariri and the Rakaia rivers, notwithstanding the Synlait and Ngai Tahu claims which are under dispute by CPW. If this is the case I do not believe that all the water should all be allocated to the one organisation. This creates a pseudo monopoly situation where water can be sold at higher prices as has happened in California. I am sure that the water needs of Christchurch and other townships will not

remain static in future and they must have the ability to apply for more from the big rivers.

40. I am concerned about the designation of the whole width of the river bed at the intake structures. Such designation would give the applicant the right to restrict access to the public to that section of the river. I believe that the public should have unfettered access rights to the whole length of both the Waimakariri and Rakaia Rivers. The only way to ensure this is to decline the application for designation to the whole river width.
41. I am also very concerned about the potential for water contamination by fuel/oil spill from machines involved in "river training" operations. "River training" will likely be a regular feature required after each fresher re-arranges the river as they have done for millennia. I find the very concept of "river training" to be abhorrent. The concept implies to put man above the environment rather than respecting and working in harmony with it.
42. I find the lack of adequate investigation of alternatives to the scheme applied for to be very short sighted. Investigation of alternatives appears to be limited the following to two aspects: the location of the reservoir and the application for both a tunnel and a pumping station to fill the reservoir. These are what I refer to as investigation of internal alternatives. I.e. scheme detail is investigated but not alternatives to the proposed scheme. The level of investigation of alternatives assumes that a predetermined volume and flow of water will be required. The applicant has premised these levels on the assumption that high water usage will be demanded over a large portion of the scheme area. No real attempt is made to investigate alternatives to irrigation or alternative farming methods. There has been no public debate as to the shape of the irrigation required or the direction land use should take. Without such debate the alternatives are limited to that assumed in the applicant's evidence.
43. On farm storage is an economic alternative as evidenced by their existence on farms to the south of the Rakaia River. Some of these have been constructed recently at a fraction of the cost used in CPW's economic evaluation. There are many benefits to this form of storage, which have been overlooked by the applicant.
44. I am concerned about the decommissioning phase of this scheme. I do not know if the flooded land will be able to be rejuvenated to once again become productive. The dam will involve a large amount of shingle that would need to go somewhere. I have not heard or read of any financial allowance being made for this phase of the scheme. In overseas cases decommissioning is discussed prior to consenting and the consenting authority often holds bonds for just this purpose. I think such a bond should be held in this case if the scheme goes ahead.

SPECIFIC CONCERNS

45. I have the following specific concerns with respect to the proposed tunnel which has been presented as a positive alternative dramatically reducing negative effects of the scheme:

- a. The construction of the tunnel does not in any manner reduce the amount of water abstracted from the Waimakariri River.
- b. The construction of the tunnel does not in any manner reduce the contamination of the abstracted waters either through storage or land usage phases. This in turn provides no reduction in the risk of contamination of the aquifers under the land to which the waters are supplied or the streams, rivers, lakes and water tables into which surface waters inevitably flow.
- c. The construction of the tunnel does not reduce the impact of the scheme on the people who live in the Waianiwaniwa Valley, in the village of Coalgate and out on the plains.
- d. The construction of the tunnel involves discharge of contaminants, principally silt, into the Waimakariri and Waianiwaniwa Rivers. I consider this to be an unreasonable request when all other land disturbances such as subdivisions are required to construct settling ponds so as to avoid discharge of silt from the site into waterways.
- e. The construction of the tunnel involves “dewatering”. No detail is given as to how much water will be extracted from the ground, how it will be used or where it will be dumped, the effect of such extraction on soil moisture levels in the soils in the region of the tunnel, how far such effects will extend and how long recharge will take. This lack of detail denies me the ability to make a reasoned comment on the proposal. Dewatering must not be allowed until this information is provided and is shown to be harmless.
- f. I am concerned that the Waianiwaniwa end of the tunnel is perilously close to the “Western Valley Fault” and may cross other fault lines yet to be identified. I cannot see any mention of this risk in the AEE and do not know what the effects may be.
- g. Many of the negative effects of the tunnel construction are glossed over and dealt with through “management plans”. These plans will not be created until it is known that consent has been granted and the conditions of consent are known. As a submitter on the application, I am thereby denied the opportunity to comment on the proposed mitigation of adverse effects.

46. With respect to “bywash discharges” I express the following concerns:

- a. I contend that the end of each canal should have a storage pond, aka Turkey nest dam, to catch the waters for the use for which they were abstracted. This structure removes the need to discharge “contaminated waters” either to land or to the waters of the Hawkins and Selwyn Rivers.
- b. I am concerned that the proposed “wetland” will not be able to cope with the proposed volume of bywash waters, i.e. the area is too small and would become waterlogged too quickly.
- c. I understand that the emergency discharges applied for are two of many such discharges into the Hawkins, Selwyn and Hororata Rivers and ultimately Waihora / Lake Ellesmere. I do not precisely know the cumulative volume of these discharges but a brief add up indicates something in the order of 24 cumecs. This is a vast volume to suddenly introduce into a river with a normal flow in the order of 3 cumecs. I do not believe this cumulative effect has been considered. If this volume were to be added to the river in a storm event when the river was already full what are the implications? Will the bridges under which the river flows cope? Will farmland adjacent to the river be flooded to any great extent?
- d. I understand the reason for the emergency bywash applications are to allow for the event that a power cut results in temporary loss of control of water flow in the canals concurrent with sudden lack of uptake by irrigators which no longer have power. I believe it would be a simple matter to construct a number of control gates which are held in the open position by an electromagnet. In the event of a power cut the magnets would let go allowing gravity to take over and close the gates. Such installations would gain immediate control and obviate the need for the emergency discharges.
- e. I do not agree with a private profit making organisation being given the right to construct works in, on, under or over a river bed which is in public ownership. If the Applicant’s proposal is financially viable such works should be located on land owned by the Applicant and located out of the riverbed. If the simple alternatives I have suggested above are workable there is no need to locate these works adjacent to a river and risk environmental damage.
- f. The design of the scheme requiring bywashes and emergency flow discharges appears to be a “business as usual” approach whereby surplus contaminated waters are foisted onto the environment. In this day and age innovative thinking is required to come up with win – win solutions, where agriculture can be advanced at minimum cost to the environment. The engineering design proposed clearly lacks any imagination or lateral thought in order to come up with such solutions.

CONCLUSION

47. For the comprehensive reasons outlined above, I do not think that the applicant's proposal for a large scale irrigation scheme in the Canterbury Plains represents an appropriate activity. I ask the Commissioners to decline consent to the Notice of Requirement and all associated resource consent applications which would enable such a scheme to proceed.

Barry Mathers
Member
Malvern Hills Protection Society

Appendix A

TITLE: CPW Trustworthy?

CPW said it is a 'high flows into storage' scheme:

...to gain stakeholder support...

"This will be achieved by harvesting water that flows to the sea from the Rakaia and Waimakariri rivers during periods of high flow and storing that water in a reservoir in the foothills until it is needed to irrigate the rich but otherwise dry areas of the Central Plains." (2004 Prospectus and Investment Statement, section 8, p.1)

The proposed Central Plains Water scheme, where high flows from the glacier fed Rakaia and Waimakariri Rivers would be stored..." (CPW "Water Update" newsletter, February 2005; available at:

<http://www.cpw.org.nz/pdf/CPW1&2.pdf>)

...to persuade the public...

The scheme "would entail tapping the Rakaia and Waimakariri at peak flow periods in winter and spring. The water would be stored, then used for irrigation during the drought-prone summers."

(Press, 18/2/02, p.8).

"...high flows from the two major rivers are stored..."

(CPW media release, 12 March 2003; available at:

<http://www.cpw.org.nz/pdf/cpw%20gw%20quan%20rlse%200303.pdf>)

"Most of the water will be taken from the rivers in flood peaks or from surplus summer flows." (Press, 9/7/05; p.3).

...and to obtain requiring authority status...

"The Scheme will take water from intake races on the Rakaia and Waimakariri Rivers during periods of high flow and convey it via open canals to a reservoir in the Waianiwi Valley where it will be stored until it is needed for irrigation in the Scheme area."

(CPW's application to the Minister for the Environment to obtain requiring authority status, p.2)

"The irrigation scheme that Central Plains Water proposes is based on the concept of 'water harvesting'. If consented, it will take water from intake races on the Rakaia and Waimakariri Rivers during periods of high flow. The water will then flow through open canals to a reservoir in the Waianiwi Valley where it will be stored until it is needed for irrigation."

(Press release from Minister for the Environment, David Benson Pope, 24 November 2005)

Whilst pursuing a run-of-river based scheme...

"The order of priority of source shall be as follows:

- Supply from available run of river water in the Rakaia River...
- Supply from available run of river water in the Waimakariri River.

- Supply from storage...”

(CPW Assessment of Environmental Effects, November 2005, p.1-3: available at:
<http://www.cpw.org.nz/pdf/AEE%20Central%20Plains%20ECan%20Applications%20Sections%201-3.pdf>)

...that avoids high flows...

“Very little water will be taken when rivers approach peak flood levels...”

(In the CPW Briefing Paper (February 2006, p.9); available at:
<http://www.cpw.co.nz/pdf/Briefing%20paper%20-%2006%2002%2021.pdf>)

...and makes little use of storage!

“For a lot of the time, the water will leave the rivers and pass through the scheme without entering the storage lake.”

(In the CPW Briefing Paper (February 2006, p.9); available at:
<http://www.cpw.co.nz/pdf/Briefing%20paper%20-%2006%2002%2021.pdf>)