

SUMMARY OF SUBMISSIONS

Central Plains Water Enhancement Scheme

Applications Notified 24 June 2007

SUPPORT

Whole Scheme

Issue

Whole Scheme:

- Good use of resources
- Water storage is beneficial
- Not only dairy farmers want it
- Local scheme owned by local people
- Good opportunity for power generation
- Support but need for good monitoring / management plans

Economic Benefits

- Economically sensible
- Opportunities for tourism be bike/walking trails
- Increase in community facilities / job opportunities

Community Benefits

- Local scheme owned by local people
- Benefits for future Cantabrians – eg Opuha
- Increase in community facilities / job opportunities
- Opportunities for tourism be bike/walking trails

Agricultural Benefits

- Agriculture is the number one industry in NZ, water storage is the way of the future
- A way of gaining water supply without having to go through Ecan consents process individually – no issues regarding priority
- Opportunity for farmers previously unable to access water to now gain access
- Irrigation provides necessary protection to farming business
- Conditions must not constrain future farming activity and innovation.
- Reliability of supply
- Develop farming skills
- Opportunity to diversify i.e. specialised crops and generate more vibrant rural community

Environmental Benefits

- Enhancement of GW – benefit to Lake Ellesmere
- Reduce the use of bores/GW – beneficial for GW levels
- Waste of water out to sea - use water available

OPPOSE

Take and Use of Water

Issue

Use of water

- Contamination of groundwater – increase in nitrates, effects on drinking water quality (Templeton and Doyleston residents associations)
- Water charges – water should be user pays
- Concern about growth of Dairy farming in Canterbury
- Negative effects from intensive farming on Lake Ellesmere
- Animal health
- Concerns about effects on land from increased water levels
- Irrigation can lead to increased salinity in the soil over time
- Water quality decreasing for Christchurch, Kaiapoi and Rangiora supplies
- Soils are fragile – intensive farming not suited
- Ministry of Education – School drinking water quality

Take of water

- Changing groundwater levels
- Increase in water table – effect on Leeston Southbridge Doyleston Sewage scheme and septic tanks in Ellesmere area
- To ensure existing takes for stock water and community supplies are not compromised

Scheme:

- Burden on ratepayers
- CPW should pay for costs involved in maintaining the drainage network of the lower plains, including the openings of Lake Ellesmere

Headworks Discharges, Bywash Discharges, Emergency Bywash

Issue

Environmental Effects

- Quality of discharge back into rivers
- Irwell river – concern about water quality
- Turbidity and silting of discharges into the Waimakariri
- Ensure stormwater doesn't enter canals – water quality

Cultural/Community Effects

- Concern about potential flood risk to property
- Concern about the safety of discharges into rivers.
- Mixing of waters
- Leeston Drainage District – drains and infrastructure unable to cope with any increased flows from the scheme

Inlet, Headrace and Race Network

Issue

- Loss of land and amenity
- Concern about size of main headrace
- Races over private land that won't be irrigated under the scheme

Waianiwaniwa Valley – The Dam, Reservoir and Tunnel

Issue

Effects on Community

- Coalgate Community – loss of lifestyle
- Safety – dam failure
- Compulsory acquisition of land is wrong
- Displacement of people is unfair
- Loss of heritage value
- Impact on quality of life / property values
- Loss of valley area
- Coalgate public reserve to be lost
- Loss of rural lifestyle / heritage values for next generation
- Negative effect on tourism in area
- Loss of land from dam
- Loss of Malvern fullbore shooting range / rifle club
- Noise during construction
- Will promised recreational benefits be achieved?
- Loss of NZ deerstalkers facility
- Loss of jobs
- Visual effects / loss of scenery
- Compensation?
- Archaeological sites will be destroyed

Effects on Environment

- Water quality concerns – Opuha
- Potential for climate change in vicinity of reservoir
- Loss of mudfish habitats
- Increase in dust during construction – air pollution
- Effects on indigenous fauna and flora
- Increase in fumes from traffic
- Ecological effects on the Waianiwaniwa River

Effects on Business

- Loss of bush gully mining sites
- Coal resources in the Waianiwaniwa Valley. Proposed reservoir will affect access to the mine sites
- Negative effect on tourism in area

Effects on existing infrastructure

- Effects on transport around valley – increase in traffic

Safety Concerns

- Dam failure
- Fault line – earthquakes common in area
- Liability/insurance issues
- Silting of dam / engineering report not complete
- Concern about stability in area of reservoir ‘not safe enough for a dump’
- Concern that dam failure will result in flooding of Hororata
- No mention of an evacuation plan in the event of a dam failure

River Takes – Waimakariri and Rakaia

Issue

Environment Effects

- Bird life decreasing – native birds in the area already endangered eg Wrybill, black billed-gull, black-fronted tern
- Flows will be closer to minimum flows more often
- Reduced flows may increase risk of didymo
- Potential change to sediment transport
- Increase in silt – jeopardise existing flood protection works
- Reduced recharge to shallow wells
- Disturbance of bed to maintain intakes
- Weed invasion due to reduction in flows
- Internationally significant braided rivers
- Negative effect on ecosystems
- Destruction of natural habitats
- Support for high flow takes rather than low flow
- Change in flow characteristics and potential for increased erosion.
- Negative effect on native fauna and flora
- Reduction in flows will reduce the dilution of current discharges into the rivers
- No bird survey completed in AEE

Recreational Effects

- Fisheries – Salmon, trout, whitebaiting
- Jet boating
- Loss of amenity
- Decline in recreational values
- Decrease in tourist operations
- Restricted access to the rivers for fishing / recreation
- Canoeing / kayaking
- Disturbance of archeological sites around the Kowai and the Waimakariri Rivers

Cultural Effects

- Mixing of waters – negative effect on Mauri

Rakaia River Take and Associated Works

Issue

Environmental Effects

- Adequate fish screens required
- Concerns of diversion and works in the bed on downstream properties and other intake structures

Recreational Effects

- High angler use of Rakaia River – potential for this to decrease

Effects on other Schemes

- Concerns by consent holders in relation to min flow banding
- Implications of Barhill Chertsey scheme conditions

Waimakariri River Take and Associated Works

Issue

Environmental Effects

- Concerns regarding reduced high flows leading to build up of sediment and vegetation
- Effects on groundwater supplies – contamination and reduced availability
- Loss of recharge to aquifers feeding Avon, Heathcote, Styx and Kaiapoi rivers
- Effects on the natural environment
- Loss of aquatic habitat, increased algal blooms, changes in temperature
- Increased silting at the mouth of the river – increase in flooding
- Effects on coastal erosion – may increase flooding
- Hackett Creek – Salmon spawning area
- Water should be taken at the bottom end of the river – as less adverse effect

Effects on Community

- Loss of amenity value – family values
- Christchurch City drinking water quality
- Concern about reliability of groundwater supply
- Loss of land for infrastructure

Recreational Effects

- Effects on recreational opportunities
- Negative effects on the Coast to Coast and other multi-sport events
- Recreational Kayaking and Jet boating – safety issues if river flows are reduced
- Concerned about changes in river flow in operating Jet Boat businesses – too dangerous to navigate, inlets will be a hazard
- Hackett Creek – Salmon spawning area
- White-baiting
- Reduction in flows would affect operations of the Coastguard

Dam Site, Inlet Canal, Headrace Canal, Race Network.

Issue

Environmental Effects

- Dust during construction
- Fog and mist, and insect nuisance as result of water
- Fogs generated magnify the effects of unpleasant smells
- Concern about river disturbance / works for crossings
- Dust discharges at the site
- Loss of Shelter belts

Effects on Community

- Blacks stream – concern about effects on property
- Concern about walkers / cyclists along canal routes – effects privacy of homeowners along routes
- Access to farmland affected
- Concern about proximity to schools (Sheffield, Greendale) – disruption to students learning
- Increased traffic flows during construction
- Vibration during construction – effects on buildings and infrastructure
- Risk of drowning

Cultural Effects

- Historical significance of farmland that will be flooded e.g Deans Family.
- Cultural significance of features
- Graveyard at Kimberley very close to water race. No consultation about this issue

Whole Scheme

Issue

Whole Scheme/Logistics

- Privatisation of water resource for benefit of few
- Compulsory land acquisition unfair
- Privatisation of natural resource
- Water is public resource
- Flawed economics
- NZ 'clean and green' image compromised
- Fear that ratepayers will have to pay if it goes wrong
- Is the scheme even needed? Do we need more dairy farms etc?
- Concerns about direct interference with other exercising existing consents
- No requirement for farmers to withdraw their groundwater consent, if gain water from the Scheme
- Ecan - Rating district concerns, hydrological monitoring sites, impact on CRC land

Environmental Effects:

- Modeling doesn't take account of climatic change
- Concern about water quality of Lake Ellesmere and lowland streams
- Insufficient AEE provided, particularly regarding groundwater quality and quantity and surface water information
- Effects on groundwater levels

Community/Cultural Effects:

- Quality of drinking water
- Effect on landscape – irreversible
- Loss of access to rivers
- Canals will limit access for emergency services
- Not enough consultation, ie no specific locations for canals
- Leeston – Landowners concerned properties turn into swampland
- Potential for Christchurch International Airport to be affected due to increase in fog
- Risk to Christchurch city regarding increased potential for flooding
- Loss of tourism due to less recreational opportunities on the river
- Groundwater levels increasing will effect the operation of quarries at McLean's Island, and Old West Coast Road
- Transit roading concerns

Sustianability:

- Concern about area being used for dairying
- Project is unsustainable

Consideration of Alternatives:

- Piping of water should be considered
- Small scale on-farm storage as opposed to large-scale storage dams
- Require a bond

Tunnel and Bywash Applications

Notified May 2007

**CRC072760, CRC072761, CRC072762, CRC072765, CRC072766,
CRC073313, CRC071917, CRC073034, CRC071916, CRC073035**

SUPPORT Whole Scheme

Issue

Support the whole scheme

- Will improve the CPW scheme
- Economic benefits (farmers and Canterbury)
- Irrigation is important for farming
- Scheme enables farmers to plan ahead
- Environmental effects are minor
- Tunnel is a safer option
- Helps to maintain lowland stream levels
- Minimize impact of draught

Tunnel Option reduces impacts of the scheme

- On affected land owners
- Visual impact
- Less evapotranspiration

No adverse effects

- eg on Hawkins River

Whole Scheme

Issue

Effects on Community

- Noise levels during construction phases
- Dust from construction
- Safety/risk at sites of discharge
- Loss of land
- Taking of land by force
- Restricted access to recreational sites
- Vibrations
- Loss of homes/neighbours
- Upset the lives of families
- Impaired social well-being
- Loss of vehicle accessibility and ready stock mobility
- Business lost (tourism)
- Loss of access to roads
- Danger/risk of building on a faultline

Mixing of water

- Glacial fed water into lowland rives will change the natural habitat/environment
- Maori/culture

Effect on businesses

- Tourism
- Gravel extraction (rise in groundwater level)
- Coal and mineral mining
- Farming (stock races, loss of land, loss of access)

Landscape:

- Artificial structures
- Loss of naturalness
- Scar local countryside

Effects on Recreation:

- Adverse effect on sports fish and game bird habitat
- Effect on angler and hunter amenity
- River users
- Walkers/runners

Cultural Effects

- Mixing water from different sources
- Recreational use limited from discharge
- Disruption of environment and surrounding historical sites
- Adverse effects on sport and recreational environment

Inadequacies of the AEE

- Significance and complexity of proposed activities is understated
- Lack of proposed mitigation
- Lack of landscape assessment
- Proposed conditions too flexible
- Status of activities incorrect
- Management plans prepared after consent granted

Efficiency/ Sustainability

- Application is contrary to planning documents and the RMA
- Does not promote sustainable management of NZ
- Does not promote the efficient use of water

Impacts on existing infrastructure

- State highway
- Roads
- Rail corridors
- Unsuitable roading for construction access

Whole scheme:

- Inadequate consultation with the local community
- Inadequate consideration of alternatives
- Irrigating dry lands will lead to environmental disaster
- "Philosophical antagonism to plunder of public resources for private gain
- Inequitable distribution of resources
- Highly productive land should be protected – not destroyed
- Expensive process – concerns if it can not be completed
- Disruption and inconvenience of prolonged construction period
- Cumulative effects of whole scheme
- Flawed scheme
- Conflict of interest/objectivity
- Dirty Dairying
- Volumes of concrete required

Discharge Permits

Issue

Environmental Impacts

- Impact of riparian areas - scouring and erosion from emergency discharges
- Impact on aquatic ecosystems – from sediments in discharges
- Risk of erosion
- Groundwater quality from rapid discharge

Surface Water Bodies

- Sediment and contaminants discharged into water ways (esp. Waimakariri, Hawkins and Waianiwaniwa Rivers)
- Impact of contaminants of river ecology
- Biosecurity risk – spread of contaminants; Didymo
- Too much water taken from the Waimakariri River
- Effect of discharges on hydrology
- Impacts on Lake Ellesmere

Effects on fish and fishing

- Fish passages
- Spawning sites
- Flooding of habitat of Canterbury Mudfish
- Effect on sports fish

Air

- Sediment and contaminants discharged

Increased risk of flooding:

- Want a warning system of emergency discharges.
- Due to increased sedimentation and emergency discharges
- Safety hazard
- Esp. areas downstream of discharge into Hawkins River
- Direct effects – property damage and personal safety

Cultural Effects

- Mixing water from different sources
- Recreational use limited from discharge
- Disruption of environment and surrounding historical sites

Discharge to Lake

- Potential hazard for residents and farms.
- Increase in rates to cover costs of additional openings of the lake
- Unknown effects on water levels

Impact on Infrastructure:

- Highbank Power station
- Highbank Power station fish bypass and assoc structures

Land use and water permits

Issue

Effect on Business/Infrastructure

- Reduction in availability of aggregate
- Reduces access to coal
- Compromise operation of the railway
- Loss of access to roads

Excavation near on in aquifers

- Pollution/contamination
- Reliability of groundwater supply

Environmental Effects:

- Adverse effects from excavation and earthworks

- Contaminate streams and aquifers
- Effects on Community**
- Noise levels during construction phases
- Dust from construction
- Safety/risk at sites of discharge
- Loss of land
- Taking of land by force
- Restricted access to recreational sites
- Vibrations
- Loss of homes/neighbours
- Upset the lives of families
- Impaired social well-being
- Loss of vehicle accessibility and ready stock mobility
- Business lost (tourism)
- Loss of access to roads
- Danger/risk of building on a faultline
- Tunnel to go under house - no consultation or compensation
- Loss of heritage sites
- Safety hazard

NEITHER SUPPORT OR OPPOSE

Acknowledge a number of environmental effects – require mitigation and quantification of the effects