

**ENVIRONMENT CANTERBURY  
ADDITIONAL RESOURCE CONSENT APPLICATIONS PUBLICLY  
NOTIFIED ON 5 MAY 2007**

**Applicant:** Central Plains Water Trust  
**Address:** Buddle Findlay, PO Box 322, CHRISTCHURCH - Attn: Rachel Dunningham

**Long Tunnel**

**Purpose:**

The following applications relate to activities associated with the proposed construction, operation and maintenance of an approximately 10 kilometre long tunnel of approximately 4 metres diameter, and a minimum depth below ground level of 30 metres (excluding the portal areas). The tunnel would carry water from the proposed upper intake on the Waimakariri River to the proposed Waianiwaniwa Reservoir, as part of the proposed Central Plains Water Enhancement Scheme.

The tunnel would incorporate two construction staging areas, each consisting of temporary buildings and construction facilities, at the Waimakariri portal and Waianiwaniwa portal. Approximately 130,000 cubic metres (solid measure) of material would be excavated from the tunnel, via a tunnel boring machine and drill and blasting methods, and disposed of in the Waianiwaniwa Valley. Construction is expected to take approximately three years.

The 10 kilometre tunnel proposal replaces the original 15 kilometre open canal and three kilometre tunnel proposal leading from the proposed upper intake on the Waimakariri River to the Waianiwaniwa Reservoir, via the Waimakariri River terrace and Canterbury Plains near Sheffield, as notified in the original applications in June 2006. The 15 kilometre open canal and 3 kilometre tunnel option is no longer being pursued by Central Plains Water Trust and has been eliminated from further consideration in the current resource consent process.

**For the purpose of these applications the following locations apply:**

**The tunnel** – the proposed 10 kilometre long tunnel from the Waimakariri portal (described below) to the Waianiwaniwa portal (described below).

**Waimakariri portal** – at or about map reference NZMS 260 L35: 268-640, on the south bank of the Waimakariri River, adjacent to Keens Road.

**Waianiwaniwa portal** – at or about map reference NZMS 260 L35: 283-541, adjacent to Malvern Hills Road.

The location of the tunnel and the tunnel portals is illustrated in Map 1.

**The following applications have been lodged for activities relating to the tunnel:**

**CRC072760** - a land use consent to excavate a tunnel under the bed of the Hawkins River and tributaries, at or about map reference NZMS 260 L35: 278-578, near Bluff Road. A duration of 35 years is sought.

**CRC072761** - a land use consent to excavate a tunnel over unconfined or semi-confined aquifers along the route between the Waimakariri portal and Waianiwaniwa portal. A duration of 35 years is sought.

**CRC072762** - a water permit to take water for dewatering the tunnel during construction along the route between the Waimakariri portal and Waianiwaniwa portal. A duration of 10 years is sought.

**CRC072765** - a land use consent to store hazardous substances (principally diesel) to power machinery and plant at the Waimakariri portal and Waianiwaniwa portal. A duration of 10 years is sought.

**CRC072766** - a discharge permit to discharge contaminants to air from the operation of a diesel generator during construction at the Waimakariri portal and Waianiwaniwa portal. A duration of 10 years is sought.

**CRC073313** - a discharge permit to discharge contaminants, principally sediment, and water to the Waianiwaniwa River near the Waianiwaniwa portal during construction of the tunnel. A duration of 10 years is sought.

### **Additional Bywash Discharges**

#### **Purpose:**

The following applications relate to operational bywash and emergency peak discharges at two locations –

- (1) The Selwyn River four kilometres east of Hororata, near Hawkins Road, and
- (2) The Hawkins River two kilometres upstream from Sheffield, near Bluff Road.

These new applications are additional to those already publicly notified for the proposed Central Plains Water Enhancement Scheme and have been required as a consequence of changes made following further consultation with landowners.

Under normal operations the bywash points will discharge small volumes of surplus water – approximately 0.4 cubic metres per second ( $m^3/s$ ) and 0.3 cubic metres per second ( $m^3/s$ ) into the Selwyn and Hawkins Rivers respectively – at the end of the network races. Under emergency conditions there could be rare and brief times when up to 3 cubic metres per second ( $m^3/s$ ) and 2.5 cubic metres per second ( $m^3/s$ ) could be discharged into the Selwyn and Hawkins Rivers respectively. Operational discharges will pass through constructed wetlands but emergency discharges may pass direct to the rivers.

The locations of the discharge points are illustrated in Map 3.

#### **The following applications have been lodged for activities relating to the additional bywash discharges:**

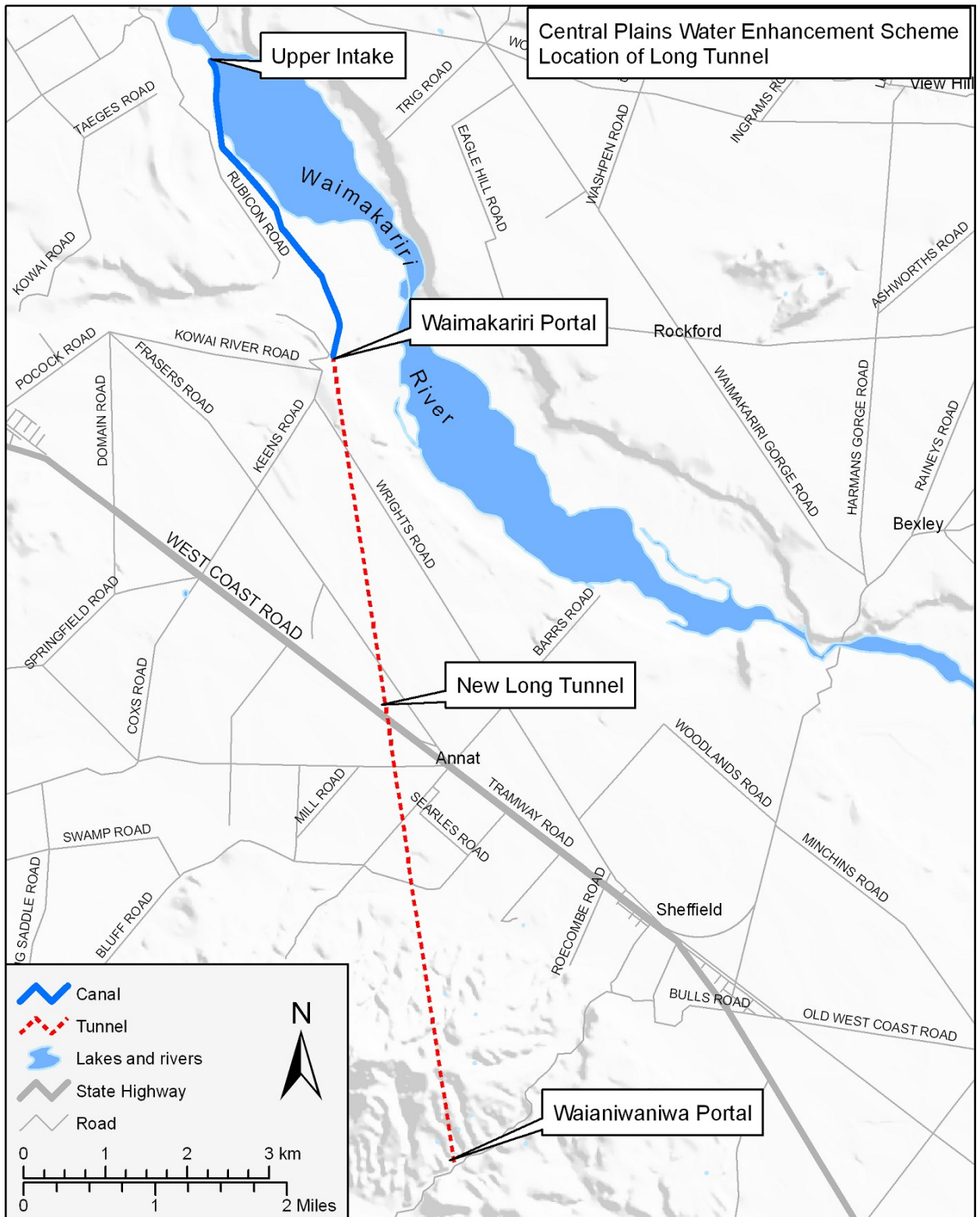
**CRC071917** - a discharge permit to discharge water and contaminants to land and water at a maximum rate of 0.4 cubic metres per second ( $m^3/s$ ) to a 0.1 – 0.2 hectare constructed wetland, except that during emergencies the discharge could reach a maximum rate of 3  $m^3/s$  and may be discharged directly into the Selwyn River. The discharge shall occur at or about map reference NZMS 260 L35: 289-421, near Hawkins Road, adjacent to the Selwyn River. A duration of 35 years is sought.

**CRC073034** - A land use consent to erect, and maintain discharge structures and erosion protection works and to carry out associated excavation and disturbance, in, on, under, and over the bed of the Selwyn River and riparian margins to create a 0.1-0.2 hectare constructed wetland, at or about map reference NZMS 260 L35: 289-421, near Hawkins Road, adjacent to the Selwyn River. A duration of 35 years is sought.

**CRC071916** - a discharge permit to discharge water and contaminants to land and water at a maximum rate of 0.3  $m^3/s$  to a 0.1 hectare constructed wetland, except that during emergencies the discharge could reach a maximum rate of 2.5  $m^3/s$  and may be discharged directly to the Hawkins River, at about map reference NZMS 260 L35: 281–574, near Bluff Road, adjacent to the Hawkins River. A duration of 35 years is sought.

**CRC073035** - A land use consent to erect, and maintain discharge structures and erosion protection works and to carry out associated excavation and disturbance, in, on, under, and over the bed of the Hawkins River and riparian margins to create a 0.1 hectare constructed wetland, at or about map reference NZMS 260 L35: 281-574, near Bluff Road, adjacent to the Hawkins River. A duration of 35 years is sought.

# MAP 1 – LOCATION OF LONG TUNNEL





### MAP 3 - ADDITIONAL BYWASH DISCHARGES

