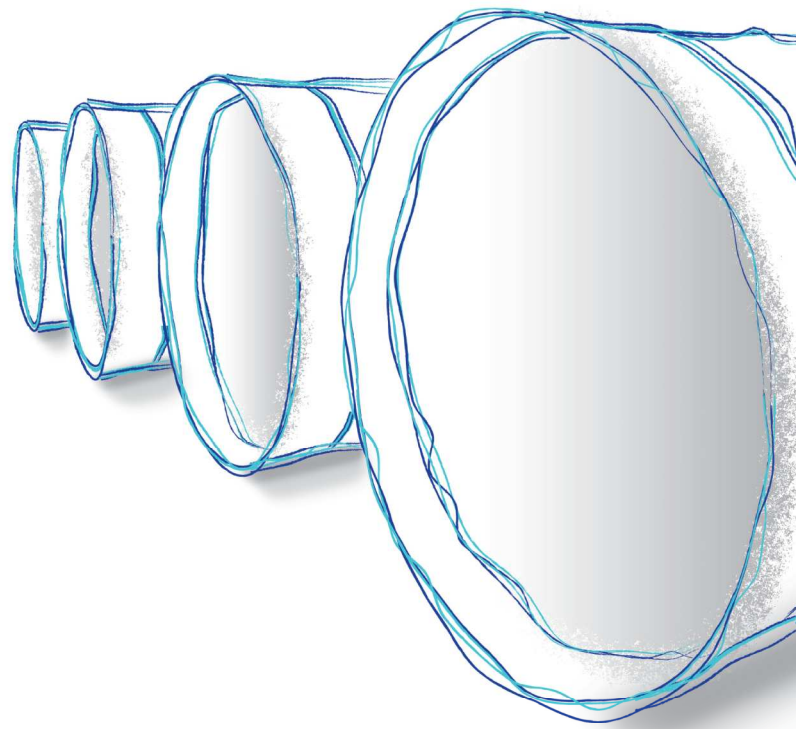




project factsheet



July 2009

Sugarloaf Pipeline – By the Numbers

The Sugarloaf Pipeline project is an important element in the Victorian Government's response to the challenges of climate change, long-term drought and Melbourne's growing population.

Scope of works

The Sugarloaf Pipeline will:

- extend approximately 70km from the Goulburn River in Yea (generally along the Melba Highway alignment) to the Sugarloaf Reservoir, near Yarra Glen
- deliver water savings achieved by modernising old and inefficient irrigation infrastructure in the Goulburn-Murray Irrigation District
- augment Melbourne's water supplies at a time of critically low inflows and short supply
- cost \$750 million – \$625 million for construction of the pipeline itself and \$125 million for

upgrades to existing treatment and supply systems

- be complete in 2010.

Project overview

Pipeline

- 70km total length
- 48km of 1750mm (outside diameter) pipeline
- 22km of 1404mm (outside diameter) pipeline
- 5500 lengths of pipe
- 10,800 welds to join the pipe
- 830m long tunnel, 2100mm in diameter

Structures

- Intake structure at the Goulburn River will transfer water to the pipeline
- High-voltage substation near Yea to provide electricity for the two pump stations

- 2 pump stations
 - Low-lift pump station at the Goulburn River
 - High-lift pump station to generate sufficient lift to pump the water up and over the Great Dividing Range
- 12 pumps
- 30km (approximately) of fibre-optic cable
- Outlet structure at Sugarloaf Reservoir will channel water into the reservoir

Earthworks

- 350,000 cubic metres of earthworks
- 400,000 tonnes of bedding material
- 13 road crossings
- 22 river/creek crossings



Environmental offsets

- 826 hectares of high-value forest habitat at Mount Typo, near Mount Buller
- 63 hectares of grassy woodlands habitat at 'Sheoak', near Yea
- Some existing offset credits of native vegetation at Christmas Hills, near Sugarloaf Reservoir

Team

1250 staff and contractors employed at construction peak, including:

- 8 pipe laying crews, laying on average total of 30 lengths each day
- 4 reinstatement crews
- 2 tunnel crews – working 24 hours' a day, six days' a week for 10 weeks.

Construction challenges

Tunnel

- The amount and strength of the rock, which is 8–10 times stronger than structural concrete

Traffic

- Reducing inconvenience to motorists while still completing construction on-time and within budget

Restricted corridor

- 30m wide construction corridor in most areas leaves little spare room

Environmental issues

- Ensuring and transferring to the Crown a net gain environmental offset for the project
- Dirt and mud on roads
- Dust
- Noise
- Protecting groundwater and waterways
- Managing biosecurity risks
- Protecting areas and items of historical and/or cultural value
- Protecting native fauna

- Managing greenhouse gas emissions and other waste
- Fire risk management

Community feeling

- Concerns about where the water is coming from – key messages have focused on improving community understanding of the link between upgrading irrigation systems and the Sugarloaf Pipeline project, in particular that water for Melbourne comes from savings from irrigation upgrades.
- Concerns about impacts on businesses as a result of construction – largely offset by deeper understanding of the economic benefits the project brings to the region through cash injection, community support program and job creation.
- Concerns about the affect of changes to traffic conditions.

Further information

The Sugarloaf Pipeline Alliance has produced a variety of fact sheets (available on the website) that can provide more detailed information about each aspect of the project mentioned here.