WESTERN CORRIDOR
RECYCLED WATER PROJECT

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RECYCLED WATER PROJECT

"The Invisible Story"

Queensland Government
The Coordinator-General

A Queensland Government
Water Project

Water plant delay fears

Supply of crucial filters under threat

More saving, less water

Words twisted in anti-recycling propaganda

Hokey pokey pipeline

You put 800m in, then you take it out ...

PROJECT NEED

WATER AND POWER FOR QUEENSLAND

- Part of an overarching multifaceted strategy – SEQ Water Grid – including new dams, desalination, recycled water, pipelines, demand management, institutional arrangements and pricing.
- Supply of Purified Recycled Water.
- Offsetting potable (i.e. drinking) water by enabling industry and agriculture to access an alternative water source.
- Provides security to significant power generating facilities.
- Economic growth in the western corridors of Brisbane – new industries.
- Driven by amendments to the Water Regulation in 2006, which details several major projects including WCRW Project.

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PROJECT SCOPE

A PROJECT WITH GLOBAL SIGNIFICANCE

At completion, the WCRW Project will be the largest water recycling project in the southern hemisphere, with the capacity to supply up to 232 megalitres of recycled water a day and a future potential capacity of up to 310 ML/day.

FEATURES:

- 3 new Advanced Water Treatment Plants
- About 190km of large diameter pipelines
- Several storage tanks/reservoirs and pumping stations
- Plants are scalable

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Tarong
Wivenhoe Release
66 ML/d
Luggage Point
50 ML/d
Gibson Island
Wacol
Oxley
30+36 ML/d
Bundamba
Swanbank
Goodna
HOME VALE
WAMURAN BASIN
HORNES CORNER
CABOOLTURE
CANNING
UPPER CABOOLTURE
BRIBIE ISLAND
SOMERSET DAM
OAKEY FLATS
LITTLE BURPENGARY
BRAMBLE BAY
DAYBORO
ARMSTRONG CREEK
REDCLIFFE
MORETON BAY
ESK
KOBBLE
MOUNT NEBO
FERNVALE
RIFLE RANGE
TARAMPA
BRISBANE
BRIGHTVIEW
GLENORE GROVE
MINDEN
HATTON VALE
GATTON
PLAINLAND
MARBURG TOWNSHIP
FOREST HILL
TENTHILL
LAIDLEY
IPSWICH
SWANBANK
GREENBANK
NEW BEITH
BEENLEIGH

PROJECT ELEMENTS
TRANSFER SYSTEM

- **Bundamba-Swanbank Pipeline**
  - Transfers treated water to Swanbank Power Station
  - Approximately 8km, 800mm diameter
- **Oxley-Wacol-Goodna-Bundamba Pipeline**
  - Transfers effluent to Bundamba AWTP
  - Approximately 25km, 1086mm diameter
  - Collection pumps, storage and transfer pumps at each WWTP
- **Bundamba-Lowood-Caboonbah Pipeline**
  - Transfers treated water to Caboonbah and Wivenhoe
  - Approximately 80km, 1451mm and 1000mm diameter
  - Booster pumps at Lowood, balance tanks Lowood and Esk
- **Luggage Point-Bundamba Pipeline**
  - Treated water from LP and GI to Bundamba
  - Approximately 50km, 1086mm diameter
  - Balance tank at Mt Petrie (near Belmont)

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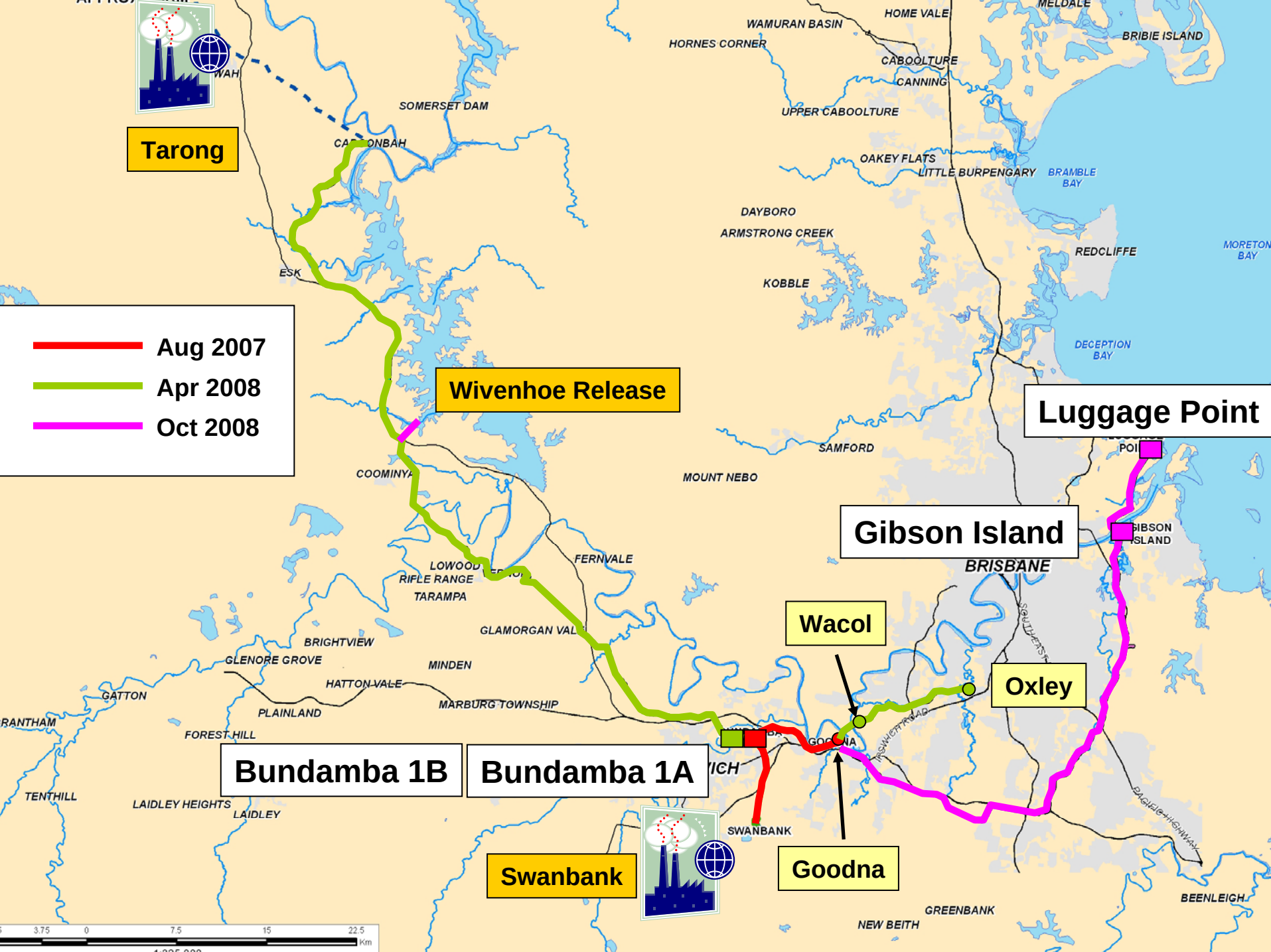
Aug 2007
Apr 2008
Oct 2008
Tarong
Wivenhoe Release
Luggage Point
Gibson Island
Wacol
Oxley
Bundamba 1B
Bundamba 1A
Swanbank
Goodna
WAMURAN BASIN
HOME VALE
MELDALE
BRIBIE ISLAND
HORNES CORNER
CABOOLTURE
CANNING
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MINDEN
HATTON VALE
GATTON
MARBURG TOWNSHIP
PLAINLAND
FOREST HILL
TENTHILL
LAIDLEY HEIGHTS
LAIDLEY
SWANBANK
GREENBANK
NEW BEITH
BEENLEIGH
Km

PROJECT SCHEDULE

TARGET COMPLETION DATE: END 2008

Stage 1A: Water supply to Swanbank Power Station

Target:
31 July 07

Forecast:
31 August 07

Stage 1B: Water supply to Tarong Power Station

Target:
30 April 08

Forecast:
30 April 08

Stage 2: Water supply from Luggage Point

Target:
31 December 08

Forecast:
30 October 08

"Target" dates are the dates set out in the Water Regulation.

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AWT PLANTS

WATER TREATMENT PROCESS

The WCRW Project will make use of almost all the wastewater from six existing treatment plants in Brisbane and Ipswich.

The key steps in the Advanced Water Treatment process are:

Step 1: Wastewater treatment plant

Step 2: Microfiltration

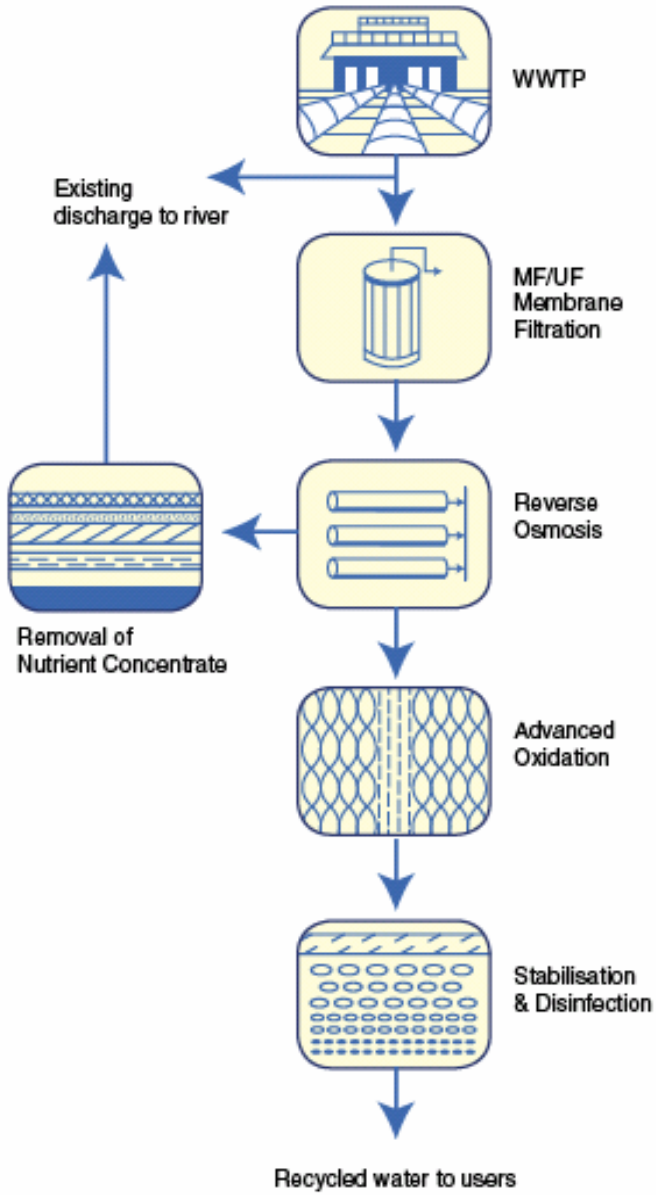
Step 3: Reverse Osmosis

Step 4: Remove nutrients

Step 5: Advanced Oxidation

Step 6: Stabilisation and Disinfection

Step 7: Water ready for use



AWT PLANTS

ROC TREATMENT AND RELEASE TO ENVIRONMENT

- **One of the key project objectives**
- **Working with Healthy Waterways and EPA**
- **No net increase in total nutrient load**
- **Modelling of Brisbane River being undertaken**
  - Generally TP levels much improved over current
  - Management of local toxic impacts at outfalls
  - Current ROC releases at Goodna, Luggage Point and Gibson Island

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PROJECT STATUS

MAJOR CONTRACTS AWARDED, CONSTRUCTION BEGUN

- Dedicated Project Team
- Multi-million dollar contracts fast tracked and commenced:

Bundamba AWT Plant	Thiess and Black & Veatch
Luggage Point AWT Plant	CH2M Hill and Laing O'Rourke
Gibson Island AWT Plant	Montgomery Watson Harza, Burns and Roe Worley, Baulderstone Hornibrook and United Group Infrastructure
Western Pipeline Alliance	McConnell Dowell, Abigroup and GHD
Eastern Pipeline Alliance	AJ Lucas, Transfield Services, GHD, Sunwater
Scheme Operator	Veolia Water Australia
Swanbank Pipeline	SRWP Alliance

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PROJECT STATUS

CURRENT STATUS – STAGE 1A

- Thiess and Black & Veatch started construction on the AWT Plant at Bundamba in October 2006.
  - About 12,400m3 concrete poured
  - 530 people on-site
  - First RO skids on-site
  - On schedule… many critical paths
- Pipeline from Bundamba to Swanbank under construction by SRWP Co.
  - About 400m of 8km remain to be constructed
  - Running to schedule

WCRWP Pipe laying at Bundamba, February 07

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PROJECT STATUS

CURRENT STATUS – STAGE 1A

- Effluent collection pipeline Goodna to Bundamba (Eastern Pipeline Alliance)
  - Three pipes under construction
  - Effluent, treated water, ROC
  - About 1.5km laid of 9km
  - Completion boosts Bundamba production

WCRWP Pipe laying at Redbank, May 07

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PROJECT STATUS

CURRENT STATUS – STAGE 1B

- Bundamba-Caboonbah Pipeline
  - All environmental approvals
  - Land acquisition
  - 22km pipe delivered
  - 7km laid
- Bundamba 1B AWTP
  - Target cost submitted
- Oxley-Goodna Pipeline
  - All environmental approvals
  - Land acquisition under way

Pipe Stockpile near Caboonbah
May 07

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PROJECT STATUS

CURRENT STATUS – STAGE 2

- Gibson Island AWT Plant
  - Pilot plant in operation
  - Design well progressed
  - Piling in progress
- Luggage Point AWT Plant
  - Fill completed (60,000m^3)
  - 200 piles driven
  - Design well progressed

Piling Works at Gibson Island
May 07

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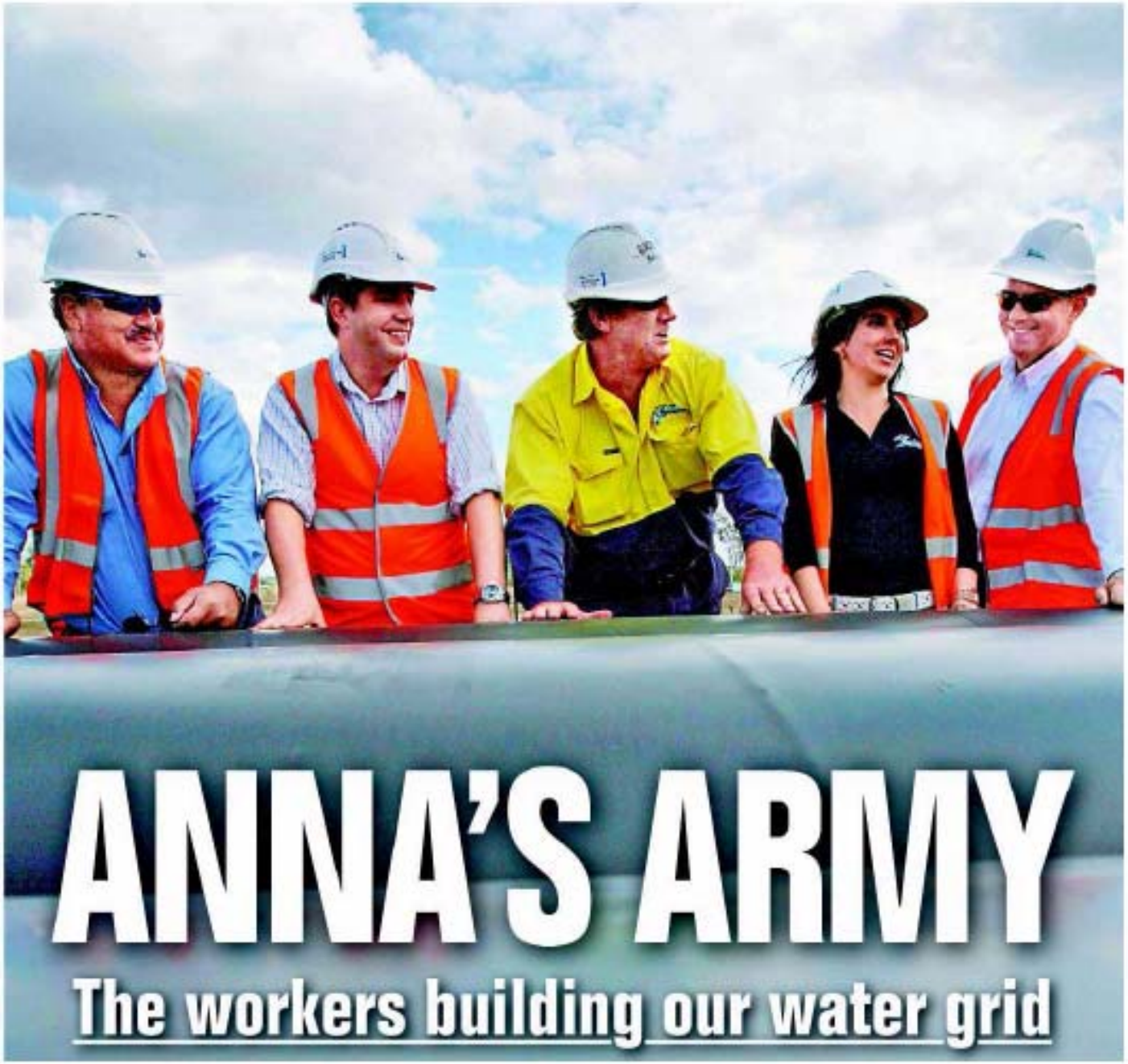

ANNA'S ARMY

The workers building our water grid

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