

VICTORIA

Victorian
Auditor-General

Goldfields Superpipe

1 Executive summary

1.1 Introduction

For some years now the Victorian Government's delivery and management of its water resources have been undertaken in unprecedented drought conditions. In the key regional centres of Bendigo and Ballarat the drought has reduced the volume of water in storages to approximately 10 per cent of capacity, their lowest level ever recorded. Despite the severe water restrictions introduced by the Coliban Water Authority ('Coliban') and the Central Highlands Water Authority ('Central Highlands'), Bendigo and Ballarat almost exhausted their drinking water supplies in 2007.

In response to the extreme conditions, the State Government, in conjunction with Coliban and Central Highlands, is constructing a major water pipeline, called the 'Goldfields Superpipe' that will connect Ballarat and Bendigo to the Goulburn River system.¹ The Superpipe aims to improve the security of water supplies in the region by allowing both water authorities to access the more reliable supplies in the Goulburn River.

The Superpipe has three components:

- a Bendigo pipeline that will draw water from the Waranga Western Channel and deliver it to Bendigo via the Eppalock to Sandhurst pipeline, and supply Lake Eppalock
- a Ballarat pipeline, from Bendigo's Sandhurst Reservoir to Ballarat
- an augmentation of the existing Eppalock to Sandhurst pipeline.

The 46.5km Bendigo pipeline is being managed by Coliban. The 87km Ballarat pipeline is being managed by Central Highlands. The Commonwealth and State Governments are part-funding the Bendigo and Ballarat pipelines.

The Bendigo component cost \$66 million to build and reached practical completion on 1 September 2007. The Ballarat pipeline was budgeted to cost \$180 million. As at the end of December 2007, the Ballarat pipeline was 60 per cent complete and is on schedule to be completed by August 2008.

¹ The pipeline was completed in May 2008.

1.2 Key findings

Overall, both water authorities planned their respective project components well. They completed the necessary steps of detailing the strategic imperative for the projects, assessing alternative options, consulting with the community and obtaining the necessary approvals.

Coliban did not complete a final feasibility study before commencing the Bendigo project. Ordinarily, this would be a significant exception. However, this is mitigated by the imperatives created by the drought, the preparation of an interim feasibility study, a satisfactory business case and the fact that the other short-listed options would not have delivered sufficient water.

Construction of both pipelines commenced before Commonwealth funding was secured. It is recognised that the worsening drought imposed an imperative on the projects, and the Minister for Water requested the two authorities to commence the projects. Nevertheless, even in urgent circumstances, prudent project management requires that funding sources be secured, or, alternatively, that clear contingency arrangements be put in place.

Notwithstanding the urgency of the projects, the procurement processes would have been more robust if:

- Coliban had prepared a probity plan and contract management plan at the outset
- Coliban and Central Highlands had separated the roles of probity auditor and probity adviser
- Coliban's and Central Highlands' probity auditors had attended all meetings with tenderers
- the funding contingency was explicit and transparent.

Central Highlands' decision to purchase pipe directly from pipe manufacturers and the strategy adopted to engage construction contractors, entailed it accepting the project supply risk and a large part of the construction risk. While this decision was driven by Central Highlands' need to complete the pipeline as quickly as possible, it exposed the Authority to a higher level of risk than would have been the case had another procurement strategy been adopted. To date, this calculated risk has had no negative financial or other impacts.

While both agencies satisfactorily conducted standard tender processes and entered into standard contractual arrangements with contractors, Coliban subsequently converted a standard procurement contract into an alliance agreement which exposed the agency to higher risk and costs because:

- the assessment of alliance partners involves a materially different process and focus from the assessment of providers under standard procurement contracts
- moving to an alliance agreement without the competitive tension from other bidders heightens the prospect of diminished value for money, in terms of the price and risk allocation.

Overall, we found that the construction of the Bendigo pipeline was well managed and that Central Highlands is currently managing the construction of its section well. Both authorities ensured that the products and services procured to date have been delivered to the quality standards, timeframes and costs specified in the contracts.

Finally, part of the pipeline is to be used to provide water to both Coliban and Central Highlands. The two water authorities propose to enter a joint venture agreement that will cover the ownership and maintenance of the Superpipe and access to the water it provides. The joint venture agreement between Coliban and Central Highlands has been approved by both authorities and is awaiting the signature of the Minister for Water.

1.3 Key recommendations

For all major procurements, water authorities should:

- secure project funding, or establish an explicit contingency, prior to commencing procurement (**Recommendation 3.1**)
- prepare a contract management plan and probity plan. (**Recommendation 4.1**)
- expand the role of the probity auditor so all meetings and communications with tenderers are monitored (**Recommendation 4.3**)

The Department of Treasury and Finance should incorporate into its investment management guidance material, clear articulation that public sector agencies should:

- only enter into alliance procurement arrangements after assessing the appropriateness of these arrangements for the particular procurement exercise and assessing the suitability of an alliance partner, using the Department of Treasury and Finance's alliancing guidelines
- not tender for lump-sum contracts and then change the arrangements to alliance contracts. (**Recommendation 4.2**)

RESPONSE provided by the Secretary, Department of Sustainability and Environment

In regards to the reports considering the Goldfields Superpipe, I note the findings that both Coliban Water and Central Highlands Water managed their respective project components well.

The audit makes recommendations regarding the need to secure Commonwealth funding for the Goldfields Superpipe. Commonwealth funding is correctly a matter for negotiation between the State Government and the Commonwealth Government rather than a water corporation. The State Government has been progressing discussions with the Commonwealth in regard to its funding for the Ballarat section of the Goldfields Superpipe since the federal election last November. Whilst those discussions have been positive, the Commonwealth is not yet able to formalise its pre-election commitment in this regard.

RESPONSE provided by the Managing Director, Coliban Water

I note that your office has made a number of recommendations, which if followed will enhance the development and management of future large capital projects both at Coliban and elsewhere.

The Managing Director of Coliban Water has also provided formal comments on other aspects of this report. These are included in Appendix A.

RESPONSE provided by the Secretary, Department of Treasury and Finance

DTF agrees that a contract management and probity plan should be prepared.

DTF notes that the current policy requires attendance of the probity auditors to the extent necessary to ensure probity of the process. The current policy also promotes flexibility in the procurement process, recognising that a differentiated, tailored strategy should be adopted based on the project's individual requirements. Accordingly, the expansion of the probity auditor's role in this particular project may not be appropriate.

DTF will review its investment management guidance material, with a view to incorporating clear articulation that public sector agencies should:

- *only enter into project alliance procurement arrangements after assessing the appropriateness of these arrangements for the particular procurement exercise and assessing the suitability of an alliance partner, using DTF's alliancing guidelines*
- *not tender for lump-sum contracts and then change the arrangements to alliance contracts, or contracts with predominantly alliance features, after selection of a preferred proponent.*

A range of further comments were also submitted by the Department of Treasury and Finance. These are also included in Appendix A.

RESPONSE provided by the Managing Director, Central Highlands Water

The Managing Director of Central Highlands Water has provided formal comments on aspects of this report. These are also included in Appendix A.

2 Introduction

2.1 The Goldfields Superpipe

Between 2004 and 2007 the Victorian Government announced a number of major projects and plans designed to better secure and manage Victoria's water resources. The projects include components for rural and urban water conservation, and for the expansion of the state's water grid to enable communities to access water from other catchments.

While the water conservation component significantly reduced Victoria's water consumption, the continuing drought in 2006–07 resulted in the lowest inflows in the state's history.

In the Bendigo and Ballarat regions, the low inflows reduced the volume of water held in storages to around 10 per cent of capacity, the lowest levels ever recorded. Bendigo and Ballarat nearly exhausted their drinking water supplies.

The Coliban Region Water Corporation (Coliban) supplies water and related services to rural and urban customers in the greater Bendigo area. The Central Highlands Region Water Corporation (Central Highlands) supplies the greater Ballarat area. Coliban and Central Highlands are Victorian Government owned statutory water corporations and were established under the *Water Act 1989*.

As part of Victoria's water grid initiative, the Department of Sustainability and Environment (DSE), in conjunction with Coliban and Central Highlands, is constructing a new water pipeline called the 'Goldfields Superpipe' (Superpipe) to connect Ballarat and Bendigo to the Goulburn River system. The Superpipe will allow the two water authorities to access more reliable supplies from the Goulburn River. The Superpipe is being funded jointly by the State and Commonwealth Governments and the two authorities.

The Superpipe has three components—a Bendigo pipeline, a Ballarat pipeline and an augmentation of the existing Eppalock to Sandhurst pipeline. The Bendigo pipeline will draw water from the Waranga Western Channel and deliver it to Bendigo via the existing Eppalock to Sandhurst pipeline. It will also supply Lake Eppalock. A separate pipeline (the Ballarat pipeline) is being constructed from Bendigo's Sandhurst Reservoir to provide water to Ballarat.

Procurement and construction of the 46.5km Bendigo pipeline is being managed by Coliban, and procurement and construction of the 87km Ballarat pipeline is being managed by Central Highlands.

Bendigo's current demand for water is approximately 38 000 megalitres per year and Ballarat's is approximately 15 000 megalitres per year. This demand is expected to increase to 54 000 megalitres for Bendigo and 25 000 megalitres for Ballarat by 2055.

The Superpipe will have a capacity of providing 150 megalitres per day and will be capable of providing Bendigo and Ballarat with 20 000 and 18 000 megalitres of water per year respectively.

The final cost of the Bendigo pipeline is expected to be in the order of \$108 million budget. The budget includes \$21 million to increase the pipeline's capacity to provide water to Central Highlands and \$21 million to purchase water.

To address the worsening drought, the initial project completion date of 2009 was brought forward to 1 September 2007. Coliban completed the Bendigo project by the revised date.

The Ballarat project is budgeted to cost \$180 million. Again, because of the worsening drought in 2006, the initial project completion date of 2010–11 was brought forward to August 2008. As at the end of December 2007, the Ballarat pipeline was 60 per cent complete and was on schedule to be completed by the revised delivery date and within budget.

2.2 Audit objective

The objective of the audit was to examine the management of the Goldfields Superpipe project. This included a review of the progress of the project against the established project delivery timelines and budgets and an assessment of the management of project risks.

2.3 Audit scope

The audit included a review of each of the following elements:

- project selection
- project governance arrangements
- project planning and design
- procurement, including initiating the procurement, tender advertising and acceptance, tender evaluation and selection, and management of probity
- project development and construction, including management of scope, risks, time, human resources and communications.

The criteria used by audit to assess each of these elements are based on the Project Management Body of Knowledge (PMBOK) and the Department of Treasury and Finance's Gateway Review guidelines.