

Title of case study	eMalahleni: Water for adaptation
Name of organization(s)	Anglo American
Business sector	Mining and Metals
Region(s) relevant to case study	<input type="checkbox"/> All regions <input checked="" type="checkbox"/> Africa and the Arab States <input type="checkbox"/> Asia and the Pacific <input type="checkbox"/> Caribbean and Central America <input type="checkbox"/> Europe <input type="checkbox"/> Least Developed Countries <input type="checkbox"/> North America <input type="checkbox"/> Polar regions <input type="checkbox"/> Small Island Developing States <input type="checkbox"/> South America
Country(s) relevant to case study	South Africa
Adaptation sector(s) relevant to case study	<input type="checkbox"/> Business <input type="checkbox"/> Education and training <input type="checkbox"/> Food security, agriculture, forestry and fisheries <input type="checkbox"/> Human health <input type="checkbox"/> Oceans and coastal areas <input type="checkbox"/> Science, assessment, monitoring and early warning <input type="checkbox"/> Terrestrial ecosystems <input type="checkbox"/> Tourism <input type="checkbox"/> Transport, infrastructure and human settlements <input checked="" type="checkbox"/> Water resources <input type="checkbox"/> Other (please specify):
Adaptation activity	<p>eMalahleni is a municipality of 400,000 people in a water-stressed region of north-eastern South Africa, where Anglo American has invested almost US \$100 million in a water reclamation plant to treat underground water from its mining operations in the Witbank coalfield.</p> <p>The city lies within the Olifants River Catchment, where climate models predict a potential reduction in mean annual rainfall by 2050. Water shortages – or flooding as a result of extreme rainfall events – could have serious implications for the area, where demand for water is</p>

	<p>increasing as supply tightens.</p> <p>In 2007, after a decade of research, Anglo American established the eMalahleni Water Reclamation Plant to treat the water from its local operations. The research was a partnership that included South Africa’s power utility, Eskom, and several other mining operators. The plant currently treats 30 million litres a day, producing potable water for use by the local municipality.</p> <p>The plant already supplies 20% of the city’s daily water requirement, and a second phase is expected to increase its treatment capacity to 50 million litres a day by 2013. This water supply provides the eMalahleni community with the capacity to address long-term climate adaptation risks from altered precipitation.</p>
<p>Cost-benefit</p>	<p>Too little water on the surface is a problem for communities, while too much water underground is also a problem for a mining company. Anglo American’s mining operations in the area around eMalahleni contain approximately 140 million m³ of water – a figure that is rising by over 25 megalitres a day. The development of the eMalahleni Water Reclamation Plant allows Anglo American to appropriately deal with this excess water, and is a win-win for both Anglo American and the local community. The project closely follows the central government’s mine closure and rehabilitation strategy, and the municipality’s employment, development and environmental requirements.</p>
<p style="text-align: center;">CLICK FOR MORE INFO</p> <p style="text-align: center;"></p>	



eMalahleni Water Reclamation Plant

Source: www.angloamerican.com