Pollution means China's thirst can't be quenched – no matter what is spent

A 50-year plan to divert the course of the Yangtze, Asia's mightiest river - to solve droughts and shortages is falling foul of costly pollution clean-up plans

The Baoying Pumping Station in Yangzhou in China's eastern Jiangsu province is one of more than 30 pumping stations to be constructed in the province as part of China's ambitious South-North Water Diversion Project. Claro Cortes/Reuters

China's biggest hydro-engineering project – the £39bn South-North Water Diversion Project, is so contaminated by pollution despite the construction of more than 400 expensive treatment plants that water remains barely usable even after treatment, reports revealed this week.

The South-North Water Diversion Project, is a hugely ambitious, 50-year project that aims to solve the country's worsening drought problems with three giant channels that will divert part of the Yangtze river towards the thirsty cities and factories around Beijing.

Contamination levels are so high along much of the eastern leg – which runs along the Grand Canal - that the water is barely usable even after treatment. Almost all of the 426 pollution control projects have been completed, but the director of the project, Zhang Jiyao told the local media this week that there was a long way to go before water quality could be assured.

This raises the prospect of further delays and costs for a project that began in 2002 and was supposed to have been operational more than three years ago. Domestic media predicted earlier this year that it would not open until 2013.

It also highlights the severity of the pollution along the coastal manufacturing belt. Despite the closure of thousands of paper mills, breweries, chemical factories and other potential sources of contamination, the water quality along a third of the waterway falls far below even the modest standards that the government requires.

The city of Tianjin – which was supposed to have been the main beneficiary of the water diversion – is already making alternative plans and building desalination plants to meet its water needs.

It is hard to escape the conclusion that planners either massively underestimated the cost of the clear-up or that local governments have skimped on taking the necessary measures.

It is a similar story for the Three Gorges Dam, which is also plagued by poor water quality. Zhang Lijun, the vice minister of the Chinese Ministry of Environmental Protection, complained that algae blooms are becoming more common as the reservoir stagnates. Local officials say they lack the funds to build treatment plants.

These two giant projects could be plumbed together if, as predicted, water from the Three Gorges reservoir is needed to supplement southern rivers depleted by the diversion project.

The government's principal concern is quantity, not quality. The falling water table on the North China plain is a priority, not least because it threatens the capital Beijing and some of the nation's main agricultural centres. Water shortages were deemed so critical last month that the authorities announced the diversion of 200m cubic meters of water from Hebei's farmfields to quench Beijing's thirst.

Populations are also being diverted. This month, the authorities moved ahead with the biggest relocation in the South-North project so far - of 60,000 people in Henan.

By the time the middle-leg of the South-North project is completed in 2013, the government estimates 345,000 people will have to be resettled and compensated.

Given the persistent pollution concerns and the increasingly unstable climate, even these radical measures will solve northern China's water woes. But this big ticket item looks set to add further to the growing economic bill for environmental restoration.

http://www.guardian.co.uk/environment/blog/2010/jul/09/china-yangtze-diversion-pollution?showallcomments=true#end-of-comments