Ambitious project set to deliver clean water next year

By JIN ZHU in Jining, Shandong
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The eastern route of the South-to-North Water Diversion Project has made obvious progress on pollution control, and will achieve its ambitious goal of supplying clean water next year, authorities said.

From January to April, the water quality of all sections along the eastern route's trunk canals increased to Grade III, the minimum standard for drinking water after necessary treatment, according to the State Council's Office of the South-to-North Water Diversion Project Commission.

Also, nearly 90 percent of monitored cross sections along the eastern route met mandatory water quality standards during the same period.

"For the eastern route, pollution control is the key to success as years of industrial pollution in the surrounding areas led to the extreme decline of local water quality," Shi Chunxian, an official on environmental protection of the SNWD project office, told China Daily.

The SNWD project, the world's largest water diversion project, is designed to take water from the massive Yangtze River in the south to meet demand in drought-prone cities in the north, via three water-diversion routes.

By 2013, the project's eastern route will transfer water from Jiangdu, Jiangsu province on the Yangtze River into Shandong province along the Beijing-Hangzhou Grand Canal.

The SNWD project office has long been concerned about the contamination of water quality in the two provinces from the industrial boom, domestic sewage from rural areas and shipping on small wharves.

All of the 426 pollution prevention projects, with a total cost of 15.3 billion yuan ($2.4 billion), have been implemented to improve water quality on the eastern route, according to the SNWD project office.

"The pollution control tasks on the eastern route are the most formidable that I have ever seen," said Zhang Bo, head of the Shandong Environmental Protection Department.

The number of paper companies in Shandong was reduced by 70 percent from 2002 to 2010, while chemical oxygen demand, a major indicator used to measure water pollution, decreased by 62 percent, according to the department.

"But the closure of such a large number of companies has not caused an economic loss in the local paper industry. The current companies are highly competitive and have mostly adopted environmentally friendly technologies to curb pollution," Zhang said.

For example, paper output in Shandong in 2010 was 2.5 times larger than in 2002, he said.

Zhang said a comprehensive pollution control scheme that combines pollution management, wastewater recycling and biological environmental protection has been launched.

The recycled wastewater is now utilized for city afforestation, cleaning and agricultural irrigation, he said.

A 50- to 100-meter-wide green belt has been built around the Nansihu Reservoir in Shandong to prevent pollution.

The reservoir was once known for its severe pollution. But as of April, its water quality was close to Grade III — a dramatic improvement from "worse-than-Grade-V" in 2006, local official figures showed.

More than 200 species of birds dwell on the reservoir, while some fish that had disappeared for many years have returned.

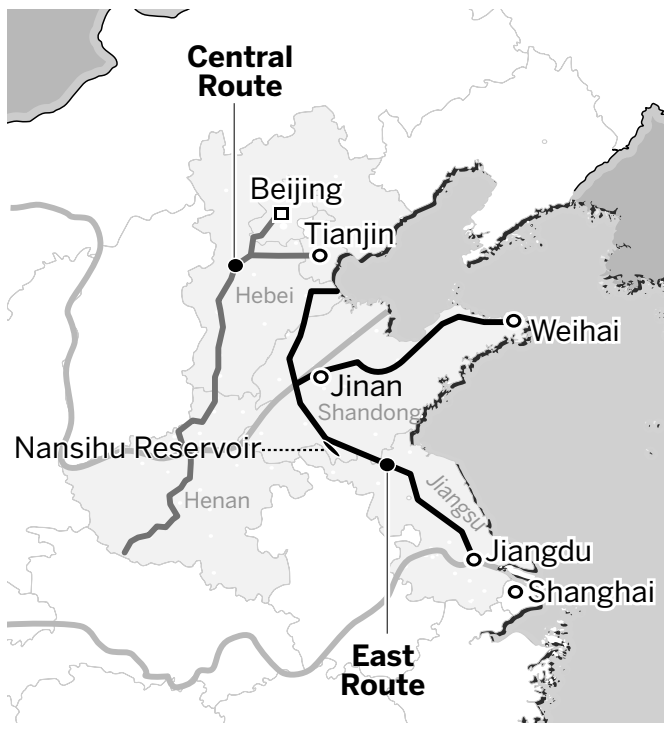
A local resident surnamed He, who lives near a small wharf in Xuzhou, Jiangsu province, told China Daily that his quality of life has improved since the wharves closed.

"I used to close my windows to keep out the noise and coal cinder. But now those troubles are gone. A leisure square will be built soon at the original place of the wharves," he said.

"Many efforts will be made to curb pollution in rural areas in the future, such as building more small-scale sewage treatment plants to prevent any pollution incidents from occurring when the eastern route starts to supply water next year," said Guo Peng, an official in charge of environmental protection on the eastern route from the SNWD project office.

Vast amounts of water will be supplied to the country's arid northern regions within the next two years, when the first phase of the project's eastern and central routes is completed.

So far, 161.7 billion yuan, or 73 percent of its total investment, has been used, official figures showed.



Source: State Council's Office of the South-to-North Water Diversion Project Commission CHINA DAILY

DENG JIA / FOR CHINA DAILY

A worker in charge of monitoring water quality drinks a sample from Weishan Lake in Shandong province, on July 18. The quality of the lake water is up to Grade III, a standard fit for drinking.

REPORTER'S LOG | JIN ZHU

Real results wash away early doubts

Too many big numbers — huge investments, projects under construction, people to be resettled — were on my mind when I wrote about the South-to-North Water Diversion Project for the first time more than a year ago.

Stories on the world's largest water-diversion project were filled with technical jargon, leading me to believe the subject was difficult to understand.

But my outlook changed when I paid two visits in the past two months to the project routes that are under construction — the eastern route, and the middle one.

The two media-group visits were organized by authorities of various levels in charge of the project. They believed it was time to let the public know of the progress on the construction, one year before the project starts providing water.

But I also learned about dramatic changes that the water-diversion project has brought to local people and their lifestyle.

During the most recent, four-day visit, which ended on Friday, reporters from 15 news agencies, broadcasters, newspapers, and magazines toured East China's Shandong and Jiangsu provinces, two major industrial regions through which the eastern route of the project will go.

When construction on the eastern route started 10 years ago, the provinces' poor water quality after years of severe pollution was a cause for concern.

During the visit, I was astonished by the remarkable improvement in the local environment and the rapid economic growth, even though local authorities had put into place strict controls on pollutant discharge.

Every sewage-treatment plant that I visited in the two provinces looked like a beautiful garden. I couldn't detect any stench while walking through the plants, and noticed that little fish were swimming in water that had been treated.

The fish, which can live only in clean water, were placed there to see whether the water is up to cleanliness standards.

What I saw in the provinces, which spared no effort to isolate every pollutant from water canals, convinced me that clean water will flow through the eastern route when it opens next year.

A worker at Weishan Lake, one of the Nansihu Lakes in southwest Shandong province, part of the eastern route, told me he and his colleagues now have major responsibilities over the lake's pollution control.

He said the project lets local residents realize the environment is also important to their lives, and doesn't focus solely on economic development.

An official from the State Council's office in charge of the SNWD project told me that he saw obvious improvements whenever he visited the two provinces in recent years.

Something else that made a deep impression on me occurred during the previous visit in June in Henan province, a region on the central route.

After spending too much time on residents' relocation related to the project, authorities urged local construction to accelerate to meet the central route's original deadline to supply water by 2014.

During my visit, high temperatures and the flood season left me in a sweat. But people involved in construction work whom I met — senior officials, experts, and workers — weren't complaining.

All their concerns are related to construction quality and speed. Their faces would light up when they told me how much water will be transferred to thirsty cities in North China.

I was moved by the large project and the people behind it. The next time I write about the project, I will include more of my real feelings, not just routine words and jargon.

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Coal city's green story inspires sustainable development

By PEI PEI
and **SUN RUISHENG**
in Jincheng, Shanxi

At first glance, Jincheng appears to be a typical coal-mining city.

The city in the southeastern part of Shanxi province boasts one-fourth of China's reserves of anthracite, or smokeless coal. Jincheng produced 50 million metric tons of anthracite in 2011, accounting for 15 percent of the nation's total.

But Jincheng is atypical, if a few other statistics are taken into account.

About 39 percent of the city is covered with forest, 23 percentage points higher than the national average.

"Blue-sky days", an indicator used in China to show air quality, numbered 354 last year, 95 more than the city had in 2005.

The city also boasts the highest biodiversity in the province. About 80 percent of the Shanxi's plants and 70 percent of its animals are in Jincheng, which accounts for only 6 percent of the province's territory.

As recently as the 1980s, the city was no different from any other major coal city. Dust and smog were part of the city, which has been mining coal for 500 years. At the time, the forest coverage rate was 16 percent, said Wang Antai, vice-director of the Jincheng forestry bureau.

In 2007, China had 118 cities that saw resources such as coal and copper depleted after years of exploitation, according to the National Development and Reform Commission.

Those cities have a total of 154 million people, more than one-10th of China's population. Most of the cities are looking for new ways to fuel their economies after years of easy money.

They could learn a thing or two from Jincheng.

Although Jincheng still boasts a large reserve of coal, it started to transform its economic model in the 1980s as the government gradually reduced the reliance on the "black gold" to encourage the forestry industry.

An environmental compensation mechanism was also established to require coal producers to pay for green initiatives, a model that set an example for China's resources-rich cities.

PEI PEI / CHINA DAILY

Fruit grower Shen Yuxi talks about the harvest in his orchard in Jincheng, Shanxi province, in May.

"In fact, the green economy is more sustainable and profitable than the resources economy," Wang said. "The black-to-green transition will not slow down the economy, either."

Forestry makes a fortune that is no smaller than coal, according to Shen Yuxi, who owns more than 30 hectares of forest that includes fruit and walnut trees.

"Farmers have been encouraged to plant cash trees since the 1980s," he said. "We can get 300 yuan ($47) of financial aid from the government for each mu (0.07 hectare) of walnut trees, and 1,000 yuan for each mu of forsythia trees, a traditional Chinese herbal medicine plant."

The subsidy to farmers comes partly from the tax levied on coal producers.

Coal-mine owners have to pay 10 yuan for each ton of coal they mined. They are also required to turn land into forest and take care of it.

Because of these policies, about 90 percent of mountain land that was left barren by mining is now covered with greenery, Wang said.

Coal producers are happy with the policy because they make money from the trees they plant, Wang added.

Zhang Yuejin, a coal-refinery factory owner in his 50s, said he might eventually become a farmer but not a coal-business owner. He now invests half of his income in walnut trees.

"The earnings (from trees) are good, stable and, more importantly, environmentally friendly and sustainable," he said. "I think green is the way to go."

Another way the Jincheng government encourages farmers to plant trees is by buying their forest.

In 2011, it spent about 40 million yuan, out of its 18.18 billion yuan fiscal revenue that is mostly earned from the coal industry, to buy the forest ownership from farmers.

The output of the city's forestry industry hit more than 800 million yuan in 2011, four times that of 2005.

The improved environment attracted a group of high-tech companies and talents to the city.

For example, Foxconn Technology, the Taiwan contract manufacturer that makes iPhones, announced last year it will spend 100 billion yuan to build a manufacturing base in Jincheng.

"That marks another leap forward in Jincheng's transformation of its growth model. We are striving for resources not only from forestry, but other sustainable industries such as high-tech," Wang said.

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