



Children from Halhul, one of the many cities and communities in the southern West Bank's Hebron Governorate now experiencing improved water security thanks to the new USAID-funded Deir Sha'ar Pipeline, which began operations in late 2015. Photo credit: Izzeddeen Alkarajeh

Pipeline to Progress

August 11, 2016

There never seems to be enough water available to meet the needs of households and businesses in the southern West Bank. One of the main culprits? An aging and inefficient pipeline system that until recently lost 45 percent of its water to leaks and illegal siphoning.

Chronic water scarcity has forced considerable hardship on residents of the southern West Bank's Hebron Governorate, home to more than 720,000 people. During recent dry spells, water typically flowed into the area only a few times each month. "I used to worry about the lack of water every day," remembers Amal Al-Baou, a 55-year-old resident of Halhul in the southern West Bank.

That has all started to change, thanks to the recent opening of a major new USAID-funded water pipeline. A \$16.5 million collaborative effort between USAID West Bank/Gaza and the Palestinian Water Authority, the state-of-the-art Deir Sha'ar pipeline is today pumping new life into area homes and businesses — carrying with it the promise of a more dependable water supply for 260,000 residents of the south-

ern West Bank.

Easing the Burdens of a Water-Insecure Life

Prior to the Deir Sha'ar pipeline's December 2015 inauguration, residents suffered through regular water supply disruptions. Private water tanker operators became fixtures in water-scarce neighborhoods, charging local families exorbitant prices for water of dubious quality. Even on the rare days when running water did flow through household taps, it was sometimes contaminated due to pipeline corrosion and bacteria growth in water distribution infrastructure.

“We would take a shower once a week, and cleaning and cooking was always difficult,” said Hanya Abu Rayan, a 40-year-old Hebron resident. “My children were always sick because the water was polluted. And water distribution was inconsistent; my husband would have to schedule his life around the days the water was delivered.”

To ease these hardships, USAID West Bank/Gaza responded with one of its largest infrastructure projects in the region in more than a decade. Constructed over the course of two years, the new pipeline now provides 18,000 cubic meters of potable water to southern West Bank residents and businesses every day — or 6.5 million cubic meters annually. The heightened flow volume also prevents the buildup of harmful bacteria within the pipeline, improving public health as a result.

With an eye to the future, the pipeline has the capacity to transport up to five times that volume of water, subject to negotiations between Israeli and Palestinian water authorities. That potential boost in transport capacity means faster relief can be provided to the southern West Bank at times of increased water demand.

“Having such a pipeline will help you to transfer larger amounts of water in shorter periods, so you can react to serious water shortages in certain areas,” said Nader Al-Khateeb, a founding member of the Palestinian Water Authority and director of the Palestinian branch of the regional environmental NGO EcoPeace. “It allows you to better manage your limited water resources.”

Already, the new pipeline's positive impacts are being widely felt. “This is a very important accomplishment that will impact thousands of Palestinian families, who will now have access to clean water in their homes,” said former USAID West Bank/Gaza Mission Director David Harden.

Spillover Benefits

Water infrastructure investments have long been [a strategic priority for USAID West Bank/Gaza](#), which has helped construct more than 900 kilometers of pipeline in the Palestinian Territories since the mid-1990s. Improved water infrastructure not only enhances public health and overall quality of life, but it also helps fuel overall economic development.

In the case of the new pipeline, secondary infrastructure constructed to support the project — such as road improvements, street lighting, and stormwater drainage infrastructure — is facilitating the movement of people and goods throughout the southern West Bank. Meanwhile, regular water access has meant local businesses reliant on water to produce goods or provide services are able to operate more effectively.

“This pipeline will give hundreds of businesses the opportunity to give prosperity for Palestinians,” said Hebron resident Malek Abualfailat. The pipeline also provides local families with an indirect economic boost by putting money back in their pockets, since there is no longer a need to “spend a tremendous amount of money for water trucks to have access to water all the time,” Abualfailat adds.

Making Every Drop Count Through Better Monitoring

One of the most important features of the Deir Sha’ar pipeline is its ability to monitor water losses. Inefficiency plagued the previous pipeline, with leaks and illegal connections preventing vast amounts of water from ever reaching the intended final destination.

“The old pipeline lost 2 million cubic meters each year — nearly half the water flowing through it,” said Harden. But thanks to a sophisticated monitoring system installed on the new Deir Sha’ar pipeline, Palestinian water authorities are now instantaneously alerted about the time and place of any breach to the new pipeline.

Such technology, according to Harden, “provides the West Bank Water Department with the ability to track and manage water resources, allowing them to be more accountable and resilient.” By reducing water losses from 45 percent to near zero percent, the new pipeline has increased annual water supply by more than 2.2 million cubic meters for 260,000 Palestinians living in the southern West Bank.

These efficiency gains and water supply improvements are helping spark optimism that the southern West Bank is at long last entering a more water-secure future. “Now I no longer worry about the water situation because of the Deir Sha’ar pipeline,” reports Al-Baou. “I can see that our future in the West Bank is getting healthier.”

By Russell Sticklor



Additional Resources:

- [USAID Bureau for the Middle East](#)
- [USAID West Bank/Gaza](#)

This article appears in Global Waters, Vol. 11, Issue 3; for past issues of the magazine, visit Global Waters’ homepage on Globalwaters.org.