

## USAID Water and Development Country Plan for West Bank and Gaza

### I. Executive Summary

There are insufficient quantities of water available in the West Bank and Gaza (WBG) to meet Palestinians' needs. At the household level in 2014 (most recent calculations), Palestinians in the West Bank received on average about 79 liters per capita per day (l/c/d)<sup>1</sup> compared with the World Health Organization (WHO) recommended minimum of 100 l/c/d. Scarcity of water stems from an inadequate sustainable supply of water, as well as existing infrastructure that is both inadequate and incapable of delivering the required amounts of water. Human and economic development are impeded due to lack of water supply. Water losses in the West Bank remain high due to aging and deteriorated pipes, as well as illegal tapping; lack of proper maintenance has resulted in frequent system operation failures. In Gaza, 95 percent of water from the Coastal Aquifer does not meet basic standards for human consumption. Only 31 percent of the Palestinian population in the West Bank is connected to a sewerage network, and only 5 to 10 percent of Palestinian wastewater is treated. According to a United Nations report,<sup>2</sup> about 90,000 cubic meters of raw sewage flows from Gaza into the Mediterranean Sea or percolates into the Coastal Aquifer every day, creating a risk of waterborne disease outbreaks.

Multiple interventions are needed to address these challenges. The USAID/West Bank and Gaza water program plans to implement activities in the water sector to meet human and economic development needs of Palestinians. The program will focus on three components: water supply, sanitation, and institutional strengthening. Activities will reduce losses, improve reliability of service, and raise the average liters of (potable) water available per capita per day, eliminating areas with less than 50 to 60 l/c/d. The percentage of wastewater treated will be increased, as well as the volume of treated wastewater available for productive use. Water sector institutions will be strengthened (from national level authorities to local and regional water service providers), focusing on loss reduction and improvement of service through a monitoring system that includes key performance indicators. These results will be achieved by construction of new and improvement of existing infrastructure, demonstration of new technologies, and the provision of training and technical assistance.

The proposed USAID/WBG water program directly supports the Senator Paul Simon Water for the World Act of 2014 and the American Consulate in Jerusalem's Integrated Country Strategy FY 2015–2017 Sub-Objective 3.1.2: “Enhanced capacity of the Palestinian Authority (PA) ministries to improve the delivery and access to key citizen services, water and sanitation services and electricity, improved road networks, and other public infrastructure.” Activities under this program support sector reform as mandated by the 2014 Palestinian Water Law, as well as the Palestinian National Policy Agenda (2017–2022)<sup>3</sup> toward economic independence and resilient communities. USAID will implement the program through a set of acquisition and assistance mechanisms (both ongoing and new) designed specifically for the differing and challenging operating environments of

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<sup>1</sup> The Palestinian Water Authority (PWA) Strategic Plan 2017-2022 uses the figure 79.7 l/c/d for Gaza and 79.1 l/c/d for the West Bank, therefore 79 l/c/d as used as an overall average.

<sup>2</sup> Report on UNCTAD assistance to the Palestinian people: [Developments in the economy of the Occupied Palestinian Territory](#), 2015.

<sup>3</sup> [Palestinian National Policy Agenda](#), 2017-2022.

the West Bank and Gaza.

## **II. Introduction**

Over the 20-plus years since the Oslo Agreement was signed, Israel has invested nearly \$2 billion in the water sector and increased its total water availability by over 1 billion cubic meters per year. Increased water availability has been a key driver of Israel's economic growth, especially in the agriculture sector. Unfortunately, little has changed in the Palestinian territories in part due to restrictions by Israel. The combined pressures of increased population and diminishing returns from aquifers in the West Bank and Gaza mean the situation has actually gotten worse for the Palestinians. Water scarcity is still the prevailing context. At the household level, Palestinians receive on average about 79 l/c/d compared with the WHO recommended minimum of 100 l/c/d. Some Palestinians in extremely water scarce areas, such as some communities in the Jenin Governorate, receive as little as 40 l/c/d. By comparison, household water consumption in Israel is about 250–300 l/c/d and about 400–500 l/c/d in the United States.

From an external perspective, such disparate access to water among people living as neighbors in close proximity to one another is a source of potential instability. Water is a crucial final status issue for the broader Israeli-Palestinian peace negotiation process; reaching a mutually acceptable agreement is an essential component of a viable two-state solution. USAID's view is that it is both within the means and very much in Israel's interest to help the Palestinians solve their water scarcity situation.

For these reasons, increasing household water availability and improving household water service have been, and will remain, major development priorities and challenges for USAID in the West Bank and Gaza.

## **III. Palestinian Authority (PA) Water Objectives**

The National Water and Wastewater Strategy for Palestine (2013)<sup>4</sup> provides a planning and management framework for the protection, conservation, sustainable management, and development of water resources, and for the improvement and sustainable management and provision of water supply and wastewater services in the Palestinian territories. In this strategy document, the Palestinian Water Authority (PWA) sets a potable water availability target of 120 l/c/d for both the West Bank and Gaza by 2032.<sup>5</sup> Despite near universal access to improved water sources (a water pipe to more than 95 percent of homes), average daily domestic water consumption currently stands at about 79 l/c/d, well below the WHO recommended minimum of 100 l/c/d. Water available for other uses, such as agriculture, industry, or tourism, is inadequate to enable the Palestinian economy to achieve and sustain economic growth.

For sanitation, the PWA has set a target of 75 percent of households connected to a sewer system in the West Bank, and 95 percent for Gaza, by 2032.<sup>6</sup> Household connection percentages in 2012 were

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<sup>4</sup> National Water and Wastewater Strategy for Palestine, PWA, 2013.

<sup>5</sup> See Table 14, page 56. National Water and Wastewater Strategy for Palestine, PWA, 2013.

<sup>6</sup> For sanitation, the PWA has set a target of 75 percent of households connected to a sewer system in the West Bank,

31 percent and 72 percent for the West Bank and Gaza, respectively. Furthermore, very little treated wastewater is currently reused for other uses, such as agriculture. The PWA targets for the West Bank and Gaza, respectively, are 60 percent and 50 percent reuse of treated wastewater for irrigation by 2032.<sup>7</sup>

#### **IV. Current and Planned Strategies and Approaches to Water and Sanitation in the West Bank and Gaza**

Over the past decade, a great deal of effort and tremendous progress has been made in legal reform of the water sector in the Palestinian territories, resulting in the establishment of legal, organizational, legislative, and administrative frameworks to ensure sustainable management and protection of water resources in the West Bank and Gaza.

Most recently, the new Water Law (2014)<sup>8</sup> established a modern institutional framework for the water sector that includes separation of regulatory, planning, and operation functions. The law authorizes the commercialization of water supply through the establishment of a National Water Company and provides for strong performance monitoring of water service providers by an independent Water Sector Regulatory Council that tracks and reports on the efficiency and performance of both bulk water suppliers and water service providers on a biannual basis, published in annual public reports.

Currently, more than 300 service providers supply water and manage wastewater. The Water Law also stipulates establishing four regional water utilities for water and wastewater as legally and financially independent entities, and transitioning water service providers from municipalities to the regional entities. To comply with the law, the PWA must consolidate the hundreds of service providers who operate throughout the West Bank and Gaza into Regional Water Utilities.

The donor landscape in the West Bank and Gaza is heavily populated, making consultation and coordination at the program and activity level important. USAID engages with other donors to ensure coordination and focus on annual and mid-term targets. Water sector activities are currently being funded by Germany, France, Japan, the Netherlands, Sweden, the European Union, the United Nations, and the World Bank Group. USAID works closely with the Office of the Quartet, the Local Aid Coordination Secretariat, and various strategy working groups that include representatives from the Government of Israel and the Palestinian Authority. Donors discuss current and planned water sector investments at coordination meetings. At recent meetings, donors encouraged USAID to continue investing in water infrastructure in both the West Bank and Gaza, not only because USAID traditionally has had sufficient funding levels to support large scale infrastructure improvements, but also because other donors plan to focus most of their resources to continue work on legal reform of the water sector in the Palestinian territories.

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and 95 percent for Gaza, by 2032

<sup>7</sup> See page 57. National Water and Wastewater Strategy for Palestine, PWA, 2013.

<sup>8</sup> New Palestinian Water Law No. 1664, dated June 14, 2014, accessed on March 13, 2017.

## V. Challenges and Opportunities in the Sector

Water supply challenges in the West Bank and Gaza are the result of a combination of factors. In the West Bank, the water provisions of the 1995 Oslo agreement established hard ceilings for allowable Palestinian abstractions from existing aquifers, and prevent the Palestinians from drilling new wells or increasing abstractions from existing wells, regardless of whether they are in the West Bank's Areas A, B, or C. Further, with no direct access to the sea, large scale desalination is not an available option to meet growing demand for water in the West Bank. In Gaza, the Coastal Aquifer, which is the primary source of water for all residents, has been severely degraded by protracted over-pumping, to the point where very little of the water produced is fit for direct human consumption. This problem of water scarcity is exacerbated by the inadequacy of existing water sector infrastructure to deliver the required amounts of water to locations where it is needed. Furthermore, water losses in both the West Bank and Gaza remain high due to aging and deteriorated pipes, as well as illegal tapping.

While it is clear that Palestinians in the West Bank and Gaza are in dire need of additional water, the question looking ahead is where to obtain it: from aquifers under their feet or purchasing from the Israelis. For the West Bank, the answer is fraught with sensitive political issues and concerns related to water rights and equitable pricing. The Oslo agreement: 1) guaranteed Israel 80 percent of the shared water resources (not including the Jordan River), and 2) established a mechanism, namely the Joint Water Committee,<sup>9</sup> through which Israel has been able to exert near-complete control over Palestinian water sector development, and more specifically to prevent the Palestinians from drawing additional supply from the aquifers under the West Bank. But to make significant progress toward reaching the WHO recommended minimum for household consumption, Palestinians will also simply need additional water supplies. This could be achieved through a combination of an increase in actual supply (either from Israel and/or by adjusting Oslo allocations to allow the Palestinians to draw more water from West Bank aquifers) and a significant reduction in water losses—currently averaging about 50 percent in Gaza and about 30 percent in the West Bank.

Wastewater collection and treatment in the West Bank and Gaza are important in order to protect the environment, safeguard public health, increase water resources, and ease political tensions. According to a United Nations report,<sup>10</sup> some 90,000 cubic meters of raw sewage flows from Gaza into the Mediterranean Sea or percolates into the coastal aquifer every day, creating an environmental hazard and raising the risk of waterborne disease outbreaks. Wastewater treatment and reuse in the West Bank are part of the PWA strategy, but currently less than one million cubic meters of wastewater is treated and reused, in part due to Government of Israel restrictions on the use of Area C and a lack of money on the part of the PWA. Capacity to collect and treat wastewater is unacceptably low and must increase rapidly as part of a long term strategy for ensuring adequate availability of water for household and other uses. A number of barriers exist to expanding wastewater treatment in the West Bank and Gaza. They include the cost of treatment, lack of

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<sup>9</sup> The purpose of the Joint Water Council (JWC) is to manage water and sewage related infrastructure in the West Bank, particularly to take decisions on maintenance of existing infrastructure and approval of new projects. New water-related infrastructure in Area C requires approval from the JWC. However, the JWC has not met since 2010 creating an impasse on new approvals.

<sup>10</sup> Report on UNCTAD assistance to the Palestinian people: Developments in the economy of the Occupied Palestinian Territory, 2015.

agreement with Israel on treatment standards, insufficient drinking water, insufficient investment, challenging topography and lack of access to Area C.<sup>11</sup> Finding and implementing cost-effective sanitation solutions that collect, treat, and reuse wastewater within the PA-administered areas (such as reusing treated wastewater for irrigation in the Palestinian agriculture sector), effectively keeping the water within the PWA system, is one way to overcome challenges in the sanitation sector.

## **VI. USAID/West Bank and Gaza Country Plan for Water**

The purpose of the USAID water program is to support Palestinian efforts to ensure safe, reliable, and affordable water supply and sanitation services to meet the human and economic development needs of Palestinian residents of the West Bank and Gaza. This program consists of multiple interventions that address three objectives:

- Increased water supply
- Expanded wastewater collection, treatment, and reuse
- Improved capacity of key institutions to effectively manage water systems

**USAID's role:** The WASH investments described here will build on USAID's comparative advantage and past accomplishments in the West Bank and Gaza. Water and wastewater sector activities address gender-related norms, practices, and inequalities in the planning, implementation, and monitoring and evaluation phases. The program continuously integrates consultations and strategies with multiple key stakeholders, including the U.S. Consulate General in Jerusalem, the U.S. Embassy Tel Aviv, and the range of development partners who are already actively engaged in water sector activities in the West Bank and Gaza. The Mission has collaborated with United Nations and Office of the Quartet officials on politically sensitive issues, and will continue to do so as needed. USAID is also responsible for obtaining permits from the Israeli civil authorities in the West Bank before water or wastewater infrastructure can be constructed.

**West Bank:** Over the past 20 years, USAID support has been instrumental in enabling the PA, PWA, and the West Bank Water Department to utilize Oslo allocations and develop an independent capacity to provide water service to Palestinian residents. USAID's focus has been on improving household water supply, including reliability of service. USAID will continue to focus on bulk water development and delivery in the West Bank over the next five years, while adding complementary activities on loss reduction, and wastewater collection and treatment, with possible pilot activities to highlight the feasibility of wastewater reuse. Given current political constraints, it is not possible for USAID (or the PWA itself) to directly resolve the larger water supply issue in the West Bank. The impact of USAID infrastructure investments is often contingent on the political will of Israel and the PA to agree upon water allocations as well as the sale and purchase of desalinated seawater. Therefore, in parallel USAID also focuses on providing assistance to the PWA on a technical level to inform better negotiations for water purchase contracts with Israel.

**Gaza:** USAID's focus in Gaza has been on increasing the supply of potable water for households and

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<sup>11</sup> Area C is an administrative division of the West Bank, set out in the Oslo II Accord. Area C constitutes about 61 percent of the West Bank territory. Area C's Palestinian population is directly administered by Coordinator of Government Activities in the Territories (COGAT) and infrastructure projects require Israeli approval.

improving water quality and reliability of water service delivery. The Mission has targeted activities identified within the Gaza Sustainable Water Supply Program, conceptualized by the PWA and the World Bank to design and implement a long-term sustainable solution to the severe water crisis in Gaza, as well as smaller projects in response to specific community proposals. The working environment in Gaza is constrained at best. Since 2007, Hamas has controlled the government in Gaza—a condition that hampers the Mission’s oversight of activities and government coordination because the U.S. government has designated Hamas as a foreign terrorist organization. Therefore, the Mission’s activities in Gaza have been restricted to supporting NGOs, five municipalities unaffiliated with Hamas, and certain approved emergency water and sanitation projects. In 2014, authority was expanded to allow USAID to work on new water and sanitation projects in support of the PWA, coordinating directly with the Coastal Municipalities Water Utility. USAID’s efforts will include construction of water blending reservoirs, installation of associated new booster pump stations, construction of new supply and distribution pipelines to and from the new reservoirs, and expansion of and/or new small scale desalination plants.

**Geography:** Activities under this program will be implemented in the West Bank and Gaza, targeting communities that currently have less than 60 l/c/d of fresh water.

**Figure 1: Main Mechanisms**

Task / Activity	Effective Date
Local Construction Program (LCP) IDIQ contract to support increased water supply, improve water quality, and reduces losses.	2013 – 2018
Palestinian Community Infrastructure Development Program (PCID).	2013 – 2018
Architecture and Engineering Services–IQC contract for design, engineering, operation and maintenance, and construction management services.	2016 – 2019

**Expected results:** Overall, these activities are estimated to provide more than 365,000 people with sustainable access to basic water supplies, and help nearly 22,000 Palestinians in the West Bank and Gaza gain access to basic sanitation.

The West Bank and Gaza Country Plan is costed based on prior year resources still available for programming, the FY 2017 estimated allocation of \$53.0 million, and the FY 2018 President’s Budget Request of \$52.0 million.

**Other USAID-funded USG activities to further this vision:** The mission may work with other USG agencies that can provide specialized expertise through technical assistance under this program. Those mechanisms will be designed in the future as needed.