Congressional Research Service

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"WATER AS A GEOPOLITICAL THREAT"
THURSDAY, JANUARY 16, 2014 – 10:00 A.M. – 2172 RAYBURN HOUSE OFFICE BUILDING, WASHINGTON, DC

HOUSE COMMITTEE ON FOREIGN AFFAIRS, SUBCOMMITTEE ON EUROPE, EURASIA AND EMERGING THREATS

Chairman Rohrabacher, Ranking Member Keating, other distinguished Members of the Committee, thank you for inviting CRS to testify here today. I will provide an overview of the so-called "Red-Dead Canal" and its potential implications for U.S. policy.

To the surprise of many outside observers, just over a month ago at the World Bank headquarters, Israel, the Hashemite Kingdom of Jordan and the Palestinian Authority (PA) signed a trilateral Memorandum of Understanding (officially referred to as the *Memorandum of Understanding on the Establishment of the Red Sea-Dead Sea First Phase, and on Water Solutions for the Region*). This MOU outlines a series of water-sharing agreements, which includes the initial phase construction of what has been informally referred to as the Red-Dead Canal.

The Red-Dead Canal is a decades-old plan to provide freshwater to water-scarce countries in the surrounding area while simultaneously restoring the Dead Sea, which has been shrinking at an alarming rate. The original "Red-Dead" concept was to pump water from the Red Sea and desalinate it for use by the participating countries. The leftover brine would then be gradually channeled down the canal 1,870 feet to the Dead Sea, helping restore the sea's receding water levels. Hydroelectricity generated from water coursing down this gradient would power the desalination plants.

Regional environmentalists have long criticized plans to restore the Dead Sea using Red Sea water. They warn that the transfusion of water from the Red Sea into the Dead Sea could have serious ecological consequences, including large scale growth of algae and formation of gypsum that would negatively impact both Dead Sea tourism and industry. Some of these environmentalists propose instead that countries should stop diverting water from the Jordan River, which feeds into the Dead Sea.

In 2005, the World Bank sponsored what became an eight-year-long feasibility study of the Red-Dead concept (formally known as the *Red Sea-Dead Sea Water Conveyance Study Program*). Almost a year ago to the day, various media outlets reported that construction firms involved in the feasibility study had declared that the project was technically "feasible," though it would come with a steep price tag costing at least $10 billion and take years to construct. Despite these challenges, in one key passage of a draft report, some authors of one of the feasibility studies wrote that there are few alternatives, noting:

"Whilst there are on-going negotiations for a redistribution of existing water resources there is apparently no Plan "B" for the provision of a badly needed new source of fresh water for either Jordan or the Palestinian Authority. It therefore

seems inevitable that if the proposed project proves to be not feasible there will be a significant delay in addressing the serious water budget deficit in the region."[1]

The Kingdom of Jordan has vigorously pursued the Red-Dead Canal concept. Jordan is one of the most water-deprived countries in the world and is constantly searching for new water resources. The civil war in neighboring Syria is exacerbating Jordan's water crisis, as over half a million refugees have fled to Jordan, increasing Jordan's population by 9% within just two years. In August 2013, the Jordanian government announced its intent to construct a scaled-down version of the canal entirely on Jordanian territory.

In terms of scale and cost, what the Jordanians have announced and agreed on with Israel and the PA is far less ambitious than the initial Red-Dead concept. In the end, the original plan lacked international financing commitments. Apparently, potential investors were unsure of what would result if brine was pumped into the Dead Sea beyond a certain level. The new plan does not include a hydroelectric component. Estimates suggest that construction of a desalination plant and pipeline under the new MOU may cost between $450 million and $1 billion. However, it is unclear who will pay for the new project – the Israeli or Jordanian governments, private companies investing in desalination, the World Bank, or other international donors. The reduced price tag presumably has a better chance of attracting international financial support.

In essence, under the new MOU, Israel, Jordan, and the Palestinian Authority have agreed to a water swap. Half of the water pumped from the Red Sea will be desalinated in a plant to be constructed in Aqaba, Jordan, over the next three years. Some of this water will then be used in southern Jordan. The rest will be sold to Israel for use in the Negev Desert. In return, Israel will sell freshwater from the Sea of Galilee to northern Jordan and sell the Palestinian Authority discounted freshwater produced by existing Israeli desalination plants on the Mediterranean. The other half of the water pumped from the Red Sea (or possibly the leftover brine from desalination) will be channeled to the Dead Sea.

In the first phase of the plan outlined in the MOU, a limited infusion of Red Sea water will be channeled through the canal into the Dead Sea, where its environmental impact will be monitored by an international consortium of scientists. According to the World Bank, "this phase is limited in scale and designed to accomplish two objectives: to provide new water to a critically water short region; and the opportunity, under scientific supervision, to better understand the consequences of mixing Red Sea and Dead Sea waters."

So what are the implications for U.S. policy and issues for Congress?

With the Obama Administration and Secretary of State John Kerry engrossed in seeking an Israeli-Palestinian final status agreement, the timing of the MOU could complement overall U.S peace brokering efforts, though the agreement was between the parties themselves with reportedly minimal U.S. involvement. According to Silvan Shalom, Israel's water and energy minister, "This is a historic agreement that realizes a dream of many years.... The agreement is of the highest diplomatic, economic, environmental and strategic importance."

For Jordan, the MOU could be considered a major diplomatic achievement. Though the current plan is a scaled down version of the original concept, the Kingdom will receive additional freshwater resources at a

[1] http://siteresources.worldbank.org/INTREDSEADEADSEA/Resources/Feasibility_Study_Report_Summary_EN.pdf

time of heightened scarcity owing to the Syrian civil war, and Jordanian workers also may benefit economically from the creation of new infrastructure projects in the kingdom.

Nevertheless, as the title of this hearing suggests, security and political challenges remain. Arab cooperative infrastructure projects with Israel could be possible targets for extremist violence, as has been the case in Egypt, where gas pipelines traversing the Sinai Peninsula to Israel and Jordan have been repeatedly sabotaged by terrorists.

Moreover, any uptick in Israeli-Palestinian conflict could jeopardize the project. Israeli opponents of the deal could argue that the Israeli government could act unilaterally to partially restore the Dead Sea without the need to send additional water resources to Israel's neighbors. Palestinians who reject cooperation with Israel could oppose moving the canal project forward without a conflict-ending agreement with Israel in place delineating the territorial and riparian rights some of them claim regarding the Dead Sea and its shore.

In the water-scarce Middle East region, water-sharing agreements in the absence of a comprehensive Israeli-Palestinian peace may be considered risky, but there are also risks associated with doing nothing, such as potential instability in a water-deprived Jordan. If living conditions in Jordan deteriorated further, one could argue that the stability of a dependable Arab partner for the United States and a reliable peace partner for Israel would be jeopardized. Over the past few years, rural southern Jordan has witnessed repeated protests coming from within tribal communities that serve as the bedrock of the monarchy. These areas require economic development if they are to remain stable.

It is possible that Congress could be asked to consider appropriating funds to support the implementation of the Red-Dead Canal. Lawmakers could pose the following questions, among others: To what extent will the project address water needs in Jordan, Israel, and the West Bank? What are the security risks and costs? Is the cost of the project on target? How will scientists monitor the environmental impact? And is the project scalable beyond the initial construction?

Thank you. I look forward to your questions.