The RSDSC: a revival of the Dead Sea?

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In the previous century Jordan, Israel and Syrian managed within a few decades to dry a lake (the Hula) and turn a river into a sewage canal (the Jordan). They also led to the drying of the southern half of the Dead Sea and to the beginning of the drying of the northern half. All as the result of the diversion of water sources for other uses.

The next vision of the leaders of Jordan and Israel, supported by the World Bank, is to repair some of the damage by channeling water from the Gulf of Aqaba in a canal to the Dead Sea, and raise its declining level. But the environmental group “Friends of the Earth – Middle East” is concerned that this canal will cause further environmental damage. The organization is fighting for a deeper examination of the project, and recently issued a report on examining the effects of the RSDSC, undertaken with the support of USAID. The report’s findings were presented at a conference in Jerusalem held last week.

These studies heighten the concerns of Friends of the Earth Middle East, which claims that the World Bank is not paying enough attention to all the environmental aspects in its feasibility study. One of the organization’s main arguments is that inadequate attention is being given to another alternative for reviving the Dead Sea, based on restoring some of the natural flow of the Jordan River which was the Dead Sea’s main source of water.

Friends of the Earth Middle East is the only environmental organization where Israelis, Palestinians and Jordanians work together. One of its main areas of activity is the rescue of the Dead Sea and maintaining its natural historic heritage. The planned canal project will be based on water drawn primarily from the Gulf of Aqaba. That water would be channeled along the Arava through a canal, which will be partly underground and partly open. Near the Dead Sea the water will be used for desalination and direct channeling into the sea, the continued drop of the level of which it is supposed to prevent. Israeli and Jordanian government officials also view the project as contributing to cooperation and strengthening the peace process.

In order to examine the project’s possible effects, Friends of the Earth studied the canal’s impact on the Dead Sea, on the Gulf of Aqaba and the Arava and an examined the project’s economic and social aspects. The study was conducted by the Israel Geological Institute, the Jordanian Royal Scientific Institute of Environmental Studies and the Palestinian organization “Water, environment and development.”

Based on the study of the impact on the northern Gulf of Aqaba, the Jordanian institute believes the activities to build the pumping facilities will cause damage to the flora and fauna on the gulf’s
sea floor. The water pumping will affect the water flow regime for a distance of three kilometers, as well as the water temperature. The consequences of those effects are not clear.

The Jordanian institute notes that pumping water to the extent planned has never been done anywhere, and therefore there is no existing information about the effects of such a project. The organization claims this means further studies are needed, or even a computerized model of the effects of pumping, but the World Bank is not interested in preparing such a model.

“Doing an experiment on ourselves”

The study by the Geological Institute found that in the Arava area the RSDSC might be exposed to grave dangers such as earthquakes and powerful floods. Damage to the project by such factors could flood large areas with salt water and be destructive to agriculture and tourism.

“Another problem is leaking from the pipe – and there is no such facility that does not leak occasionally. That would also endanger large agricultural areas, mainly in Jordan,” said Dr. Moshe Shirav, one of the people responsible for the Geological Institute’s studies, two months ago. “We are talking about a pipe carrying five times as much water as the National Water Carrier. We are actually doing an experiment on ourselves here.”

Further to these studies, Friends of the Earth notes that proposals have been raised in Israel and Jordan to use the carrier’s water to create an artificial lake surrounded by hotels and recreational facilities. The organization calls this yet another risk factor that could lead to seepage of groundwater and harm open areas and the Arava’s ecological system.

Another study by the Geological Institute raises the concern that introducing water from the Gulf of Aqaba could generate chemical processes that would cause the creation of lumps of plaster in the Dead Sea and change its nature and color. Likewise, an upper layer of water could be created that is lower in salt, with conditions allowing for the development of highly durable bacteria. The pigment of those bacteria can change the water's color in such a way that changes the amount of heat it absorbs. This would in turn increase vaporization, causing a drop in the water level.

Friends of the Earth Middle East claims the World Bank is not devoting enough time to checking the implications of the plan for the Dead Sea. The Bank did decide that a team of experts on behalf of the governments of Jordan and Israel would decide which further scientific studies need to be undertaken. But the organization is concerned the governments will apply political pressure to prevent studies that might lead to the conclusion the RSDSC is problematic.

The studies of the social and economic aspects of the RSDSC were based on surveys of tourists and visitors on the Jordanian side of the Dead Sea. They prove, according to Friends of the Earth, that most of the residents of the area and tourists from other countries hardly have any information about the project. The more the respondents knew, the greater their concerns about the effects the canal might have on the Dead Sea. The organization notes the World Bank promised to enact a process of including the public, but that process too will be managed by governments and might be biased.
Let water into the Jordan

Friends of the Earth Middle East believes a decisive aspect of the World Bank study is examining the alternative of channeling water into the Jordan to restore both the river itself and the Dead Sea. On this matter too, the organization claims the World Bank has entrusted the study to government parties in the region, instead of an independent party that would professionally examine the various alternatives.

The Jordan River alternative includes rechanneling large amounts of water from natural sources (fresh water). According to the Geological Institute’s assessment, 850 million cubic meters a year are needed just to stop the drop in the water level.

That is more than half of Israel’s fresh water consumption, and it appears the chances of obtaining such a quantity of water considering the general water shortage in the area are dismal. But Friends of the Earth claims a different water pricing policy, different acts to save water and future development of desalination plants can allow substantial amounts of water to be channeled into the Jordan River in the future.

According to Friends of the Earth, in Israel and Jordan agriculture consumes more than half the water, but produces less than 3% of the domestic products. The reason is government subsidies that enable large quantities of water to be channeled to farmers and the cultivation of water-intense crops, such as tropical fruit.

The organization believes realistic water pricing and different crop planning would lead to a considerable saving of water consumption. If you add to that the increased use of purified sewage water and an increase in the productivity of desalination plants, a large amount of water can be released into the Jordan River. This would cost less than building the RSDSC, would not have negative environmental effects and would have positive effects such as restoring the Jordan River, which is not included in the RSDSC.

“As an organization devoted to cooperation and peace building, it is not easy for us to express concern over a project whose original purpose was to promote peace,” the last chapter of the organization’s report said. “But we think the project should be advanced on the basis of the broadest knowledge; if in-depth studies are not undertaken by independent parties, there is room for concern. We call on the World Bank, the countries of the region and the countries planning to donate to the project, to discuss the issues of concern to civil society.”