December 21, 2008
Dead Sea, Jordan

Comments of EcoPeace / Friends of the Earth Middle East to World Bank Side Event Euro-Mediterranean Ministerial Conference on Water.

Red Sea – Dead Sea Water Conveyance Project.

Introduction:

1. EcoPeace/Friends of the Earth Middle East is a unique, grassroots, not-for-profit organization that brings together Jordanian, Palestinian and Israeli environmentalists with the primary objective of promoting cooperative efforts to protect our shared environmental heritage. In so doing, we seek to advance both sustainable regional development and the creation of necessary conditions for lasting peace in our region.

2. In recent years we, along with local communities, have dedicated a great deal of our time and resources to promoting a cooperative approach to water issues, particularly in the Dead Sea Basin and the Jordan River Valley.

3. Though we have led the campaign to protect the Dead Sea from further degradation, we are deeply concerned about the manner in which the World Bank and beneficiary governments are seeking to achieve this objective.

4. A study to investigate how to rehabilitate the Dead Sea, that would include a water conveyance stretching from the Red Sea to the Dead Sea (RDC) together with other alternatives, all in a comprehensive and independent fashion, would have the support of FoEME.
Summary of Concerns relating to World Bank RDC ToR and Study Process:

1. World Bank corrections / clarification to the ToR published in December 2007 agreeing to a procedure where the parties would appoint a three person team to study alternatives to the RDC fails to meet any test of independence and comprehensiveness. This task should be allocated and undertaken in a comprehensive fashion by the international consultants already hired by the Bank to undertake the feasibility study and environmental assessment. The failure on the part of the Bank to allow the international consultants to look at the broader questions of regional water management and alternatives to the RDC is in our opinion a breach of World Bank operational guidelines and prevents a valuable study from being commissioned.

2. The environmental and social implications of development plans directly benefiting from, associated with and/or linked to the building of a conduit must be fully incorporated and comprehensively studied as part of the World Bank led project. The large scale development plans of a beneficiary party as expressed in a 2007 Israeli government decision are of direct relevance and impact to the study and can not be ignored by the World Bank ToR. FoEME calls on the World Bank to revise the ToR accordingly and instruct the international consultants hired to incorporate the significant environmental and social implications of these associated development plans in the ToR study.

3. The high level of scientific certainty required by a World Bank project that would make recommendations concerning the linking of two seas, necessitates a high level of transparency and public disclosure. A review of the timetable of the ToR reveals that only 12 months are allocated for new scientific investigation and/or modeling of the possible impacts of the proposed conduit on the Gulf of Aqaba, Araba/Arava Valley and Dead Sea itself. FoEME is concerned that a 12-month period of study reflects insufficient time and resources being allocated for the task and therefore requests that the World Bank make public all documents related to decisions / compromises made by the Bank and the international consultants hired as regards the level of scientific study. Disclosure of scope and full details of study are requested as between the World Bank and the international consultant teams hired and as between the international consultants and the local consultants to be hired to under take sub-studies as detailed in the ToR.

4. FoEME is further concerned that though the Bank has now launched the conduit study, the Bank has to date failed to create the Independent Panel of Experts (IPE) whose explicit task is to review the study process and results. FoEME calls on the Bank to create the IPE without further delay and requests that the IPE review the ToR document itself for adequacy.
The following comments represent our key concerns to the present ToR in more detail:

1. Independent and Comprehensive Analysis of Alternatives to Proposed Project:
Common sense dictates that a large scale project such as the RDC, both highly complex and with irreversible implications, requires that all reasonable alternatives to the given project be investigated and costs and benefits compared. Common sense further dictates that for such a project, the study be carried out by an independent consultant and not an interested party.

Not surprisingly World Bank guidelines require that alternatives to the given project be compared and that studies of these alternatives be carried out by independent experts (OP 4.01 Environmental Assessment). Jordanian, Israeli and Palestinian environmental laws also require that as part of conducting an environmental assessment of a major project, alternatives to the project be studied. The regulation that governs the analysis of alternatives in environmental assessment under U.S. law declares that the alternatives section “is the heart” of the environmental assessment. 40 C.F.R. sec. 1502.14.

It is therefore unclear to FoEME why in Part E – Environmental and Social Assessment of the ToR, (section 13.1.9) there is no task that requires the independent consultant to study alternatives to the project at the regional level. Contrary to all other tasks defined in the ToR where the independent consultant plays an active role, here in sub-task 2, dealing with alternatives at the regional level, the role of the consultant becomes passive, accepting a report provided by no other than the three governments, who are the proponents of the RDC project.

The clarification / correction to the ToR as issued by the World Bank in December 2007, where by a three party team would now be appointed to conduct the study of project alternatives at the regional level, does not satisfy the need for independence of process as the process of selection is not by international tender but at the nomination of the governments concerned. The clarification should have empowered the international consultants to undertake the alternatives study at regional level so that both an independent study and comprehensive analysis could take place.

Without an independent study of current water resource use in the region, there will be a disincentive to cease current unsustainable water use practices and water pricing in the region. A comprehensive study to promote sustainable water management is required so that the project does not further institutionalize inefficient water allocation to the agricultural sector. This likely outcome would be contrary to the World Bank's own recommendations concerning water resources in the region, particularly pricing of fresh water to the agricultural sector in Israel and Jordan.

As to the Jordan River alternative, that in the belief of FoEME needs to be the key focus of a study of alternatives, please see Annex I attached.

For the tasks in section 8.4.1, dealing with the "Economic and Financial Analysis of Restoring the Dead Sea", common sense would dictate that comparisons need to be made with other reasonable alternatives to the project and not only the "without project situation." The same alternative comparisons are missing in section 8.4.2 as regards "Water Supply and Energy Options" for the project and for section 8.4.3 as regards a "Financing Plan". The informal discussions held between FoEME and the international consultant teams hired by the Bank have already highlighted the obstacles facing the international consultant teams due to the restrictions placed on them in the ToR concerning study of alternatives.
Without the independent and comprehensive study of reasonable alternatives and their comparison with the project, section 10.2.1 of the ToR, "Integrating Findings into a Coherent Decision Support Framework" is in the opinion of FoEME, incapable of being carried out by the international consultants in any meaningful manner.

FoEME seeks written clarification from the World Bank as to why an independent and comprehensive assessment of all reasonable alternatives is not being carried out by the international consultants now hired as part of the Feasibility Study and Environmental and Social Assessment. FoEME believes that despite the clarification / correction made, that Bank remains in breach of established World Bank policies and guidelines.

2. Comprehensive Development Framework that Ensures an Environmentally Sound and Sustainable Project:

World Bank Environment Assessment (EA) guideline OP 4.01 requires an environmental assessment to help ensure that proposed projects are “environmentally sound and sustainable.” However, the ToR only states that the outcome of the EA will help decide whether the water conveyance project is “feasible.” (ToR section 1.4.) The EA should be used to decide not only whether the project is feasible, but also whether it is environmentally sound and sustainable when analyzing the project and other alternatives. This is even more the case as the ToR itself states that "it is designed to be carried out within a comprehensive development framework (ToR section 1.4 last paragraph) and that it is being promoted as an environmental project with potential water supply benefits. (ToR section 1.3)

The ToR only deals in a comprehensive fashion with the needs of building the proposed conduit. Institutional issues mentioned in the ToR focus on ownership, operations and legal aspects of running the proposed conveyance and any desalination or energy plant to be built, but fail to deal with the institutional issues associated with promoting sustainable development in the project area.

ToR Task 9.3.1 allocates limited tasks to the consultants to study the need to support the sustainable management of the Dead Sea as a whole. This is despite the fact that the project is identified by the Bank and the beneficiaries as primarily an environmental project which is designed primarily to prevent further degradation of the Dead Sea. The need for an integrated development plan for the Dead Sea Basin or the creation of institutional support through the creation of a Dead Sea Commission are regarded by the TOR as instruments that will need to be developed at a later stage.

The lack of broader institutional focus is particularly problematic considering the induced impacts that the Bank states can be expected from a stabilized Dead Sea water level. ToR section 12.3.10 states that "total hotel rooms are projected to rise to as many as 40,000 over the next 20 years a 10-fold increase over the current situation." Without an effective management plan and an authority in place to oversee the plan, rapid tourism development alone could turn the project into an environmental disaster for the natural and cultural heritage values of the Dead Sea Basin.

The area of induced impacts, directly associated with the project, however does not only concern the Dead Sea but the Araba/Arava Valley. A 2007 Israeli government decision in support of the "Peace Corridor," supports the building of artificial lakes along the length of the Israeli Jordanian border, to be supplied water from the water conveyance. Artificial lakes, hotels and other "Las Vegas" type facilities as proposed by a member government would be a direct result of the project yet presently receive no mention in the ToR document. A major Israeli businessman, Itzhak Tshuva has used the platform of the 2007 Israeli government decision to announce the building of 200,000 new hotel rooms between the Red and Dead Seas with a plan to populate the area with 3 million people. What has been called by the Israeli media as the Peres / Tshuva plan for the Arava Valley have been directly induced by the World Bank plans for a Red Dead conduit with irreversible environmental and social implications for...
the region. A specific chapter must therefore be added to the ToR, for the consultant to carry out an environmental and social assessment as regards the Israeli government decision for development of the Arava Valley.

The additional energy requirements of the project, to initially pump water out of the Gulf of Aqaba and in to the conduit, and after the desalination process, from the Dead Sea pump desalinated drinking water up transmission corridors to major cities, will require the building of an additional fossil fuel power station. (ToR Section 4.3.1) The need for an additional power station or the expansion of existing stations would have a major environmental impact, particularly as regards air pollution, that requires detailed investigation as an additional task of the consultants not presently mentioned.

3. Scientific Credibility of the Investigation:
Following discussions held with the international consultant teams and local Jordanian, Israeli and Palestinian research institutes who might be hired to undertake sub-studies for the project, FoEME believes that due to the political pressure placed by the beneficiary governments, the World Bank ToR has opened up considerable potential for conflict of interest that could compromise the quality of scientific study.

A review of the timetable of the ToR reveals that only 12 months are allocated for new scientific investigation and/or modeling of the possible impacts of the proposed conduit on the Gulf of Aqaba, Arava/Arava Valley and Dead Sea itself. FoEME is concerned that a 12-month period of study reflects insufficient time and resources being allocated for the task. FoEME therefore requests that the World Bank make public all documents related to decisions made by the Bank and the consultants hired as regards the level of scientific study. Disclosure of scope and full details of study is requested as between the World Bank and the international consultant teams hired and as between the international consultants and the local consultants to be hired to under take sub-studies as detailed in the ToR.

Furthermore while full disclosure will help expose potential conflicts of interests, FoEME recommends that a supervisory process be set in place led by the Panel of Experts that the Bank should have created. Discussion of the role of the Panel of Experts is detailed below.

In order to strengthen the credibility of the process, both for the general public and for the international community and donor states who have been asked to financially support the study, FoEME sees the need to appoint an additional two representatives to the Technical Steering Committee (ToR section 15) – one from UNEP and the other from UNESCO. Both UN agencies have representatives in the region either in Amman or Ramallah and are the leading UN agencies dealing with environmental issues. It is not a sufficient response on behalf of the Bank that UNESCO and UNEP could be consulted. The Bank appears to miss our point of creating credibility and avoiding conflicts of interest in the first place.

The present situation where the government members of the Technical Steering Committee appoint the Panel of Experts is open to conflict of interest. In order to ensure independence of decision making the proposed two UN agency representatives to the Steering Committee should first make a recommendation for the Panel of Experts, to then be approved by the Steering Committee as a whole. (ToR section 17.1)

The tasks of the Panel of Experts need to be further defined in the ToR. A required role of the Expert Panel should be to decide on whether new studies and/or extension of study time are required. Presently (ToR section 3.4.2 sub-studies) the prescribed process is decided by the Technical Steering Committee which is made up of project proponents. Since some government representatives have already stated that the overall study process of 24 months is too long, there is a clear conflict of interest in having them also determine if and what new studies may be required and
any associated extension of time. **This task should therefore be transferred to the Panel of Experts which is not only an independent body, but is also better placed to make such determinations in the first place.**

The precautionary principle must be accepted and incorporated into the ToR. Due to the potential reliance on computer modeling – on the mixing of the waters of the Red Sea in the Dead Sea and on the impact of water extraction at the head of the Gulf of Aqaba - a level of uncertainty must be taken into consideration that the computer models might fail.

**Since the impact of building the proposed project could lead to irreversible negative consequences for the Dead Sea, Arava and Gulf of Aqaba the precautionary principle requires that the real possibility that models fail be given extra weight in any final analysis.**

FoEME repeats earlier comments made that given the ToR statement that the project purpose is primarily environmental, it defeats the purpose that the head of the Steering Committee for each beneficiary party (ToR section 15) is not a representative of the Environment Ministry / Authority. In fact it has increasingly become clear that the role of the Environment Ministries is little more than cosmetic.

FoEME is concerned that though the Bank has now launched the study the Bank has to date failed to create the Independent Panel of Experts (IPE) whose explicit task is to review the study process. FoEME calls on the Bank to create the IPE without further delay and requests that the IPE review the ToR document itself for adequacy.

**4. Cultural Benefits and Peace Dividend:**

In Part D – Overall Feasibility of the Project (ToR section 8.2.2) great emphasis is placed on identifying intangible benefits, identified as cultural heritage benefits and Peace Dividend benefits.

The World Heritage – cultural, natural and tourism values of the Dead Sea would appear to be very much related to the existing mineral composition of Dead Sea waters. According to the latest research undertaken by the Geological Survey of Israel, the unique Dead Sea mineral composition will certainly be altered by the release of waters whose sources are other than the Jordan River basin. In this regard, in sub Task 2, Tourism Industry Task 8.4.1, missing is the need to evaluate the impact of the change of composition of Dead Sea waters on cultural heritage, tourism and especially health tourism to the Dead Sea. **While a cost benefit analysis is subscribed in relation to impacts of mixing the two sea waters on the chemical industry, no such analysis is tasked under tourism.**

**A specific task of the consultants should be to gain the opinion of experts from the UNESCO World Heritage Center.**

Furthermore cultural heritage protection and raising the water level of the Dead Sea are not necessarily linked, as the present version of the ToR suggests. The creation of institutional arrangements to sustainably manage the Dead Sea Basin and the prevention of tourism development along all edges of the Dead Sea shoreline are what is required to protect cultural heritage values, issues specifically ignored by the ToR.
FoEME would like to see World Heritage registration of the Dead Sea basin be listed in the ToR as a prerequisite outcome of a project that claims to have saving the Dead Sea as its prime objective.

ToR section 8.4, task 8.4.1, seeks to identify economic benefits from a so called "Peace Dividend" that the project proponents believe to be associated with the project. To FoEME the "Peace Dividend" of the RDC is less than clear as the project solely passes through Jordan and Israel, two countries who have already signed a peace treaty. The language of the ToR section asking consultants to be "innovative" and "exercise creativity" highlights the concern that the consultants will use this loop hole in the ToR to inflate the financial benefits of the project. An objective study of alternatives to the project, a feature deficient in many areas of the present version of the ToR, would likely reveal that a “peace dividend” from alternatives to the RDC, such as the Jordan River alternative described in Annex 1, will be of much greater economic benefit to the region.
Annex I
The Jordan River Alternative
Background

Until the 1950’s the Jordan River carried an average of 1.3 billion cubic meters of fresh water annually into the Dead Sea making the Jordan River the primary source of fresh water for the lake. Today this figure has been reduced to just 70 – 100 million cubic meters per year. Israel, Jordan and Syria divert 95% of the water upstream that once flowed through the Jordan River.

By diverting fresh water from Jordan River tributaries and replacing it with sewage, not only has the Dead Sea been devastated but also the culturally and historically important Jordan River has been turned into little more than an open channel of polluted waters. This is contrary to natural and cultural heritage values subscribed to by Israel and Jordan under international conventions. In recent years grass roots activities in Israel, Jordan and Palestine have been taking place to try to raise awareness as to the state of both the Jordan River and the Dead Sea in an effort to improve the inflow of water for both.

FoEME recognizes that there are constraints involved in conducting a Feasibility Study and Environmental Assessment. However a study which seeks to address the declining levels of the Dead Sea without addressing what constitutes the root cause of the decline is in our opinion grossly flawed.

Key professionals knowledgeable of the issues in both Israel and Jordan have made statements in favor of a study of the Jordan River option. An Israeli government decision taken in 2003 required the preparation of a policy document on the future of the Dead Sea to be compiled by the Ministry of the Environment and the Ministry of National Infrastructure. The Israeli Government decision requested a review of three possible scenarios and their impact on the Dead Sea; business as usual; seawater conduit and freshwater supply. The freshwater supply refers to a study of restoring a considerable portion of the natural sources of water that flowed into the Dead Sea.

By 2006 however only the business as usual scenario was completed by leading Israeli professionals who took part in the policy document to issue the following declaration: "All who took part in preparing the current policy paper on the future of the Dead Sea call on the government to implement the above recommendations... in line with previous government decisions, are the studies... of restoring most of the natural flow (particularly of the Jordan and the Yarmuk) to the Dead Sea. This should be done parallel to the feasibility study of the Red Sea — Dead Sea conduit (the “peace conduit”), due to be undertaken by international consultants under the auspices of the World Bank.”

The Royal Scientific Society in their opening statement of a Socio-Economic Study on the RDC not only supported a Jordan River study but unequivocally stated that if the parties could only cooperate it would be the solution of choice.

"Since the main reason of the Dead Sea decline is diversion of the Jordan River and other springs that naturally flow into the Dead Sea for agricultural, industrial and municipal services in Israel and Jordan, then a simple and direct idea to save the Dead Sea would be to implement an integrated, cooperative plan between the three parties (Jordan, Israel and Palestine) to efficiently manage the Dead Sea basin and distribute the surrounding water resources equally assuring that considerable amount of fresh water flows back to the Dead Sea. This plan represents a cure of crises from its

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1 Israeli Government decision no. 2863, 5 January 2003


original cause. If this plan is well studied analyzed and skillfully managed then it will be much
easier, more feasible and with very low impact on the environment compared with other solutions.”

**The hard questions that should be studied**

It would be unreasonable to consider alternatives that are plainly infeasible as part of the Feasibility
Study and Social and Environmental Assessment; this is precisely the grounds upon which the
current ToR seeks to dismiss the Jordan River alternative.

In order to partially restore the flow of the Jordan River, riparian countries would have to reduce the
amount of water being diverted upstream for domestic and agricultural use. This can be achieved
through the promotion of public and private water conservation measures, more realistic water
pricing, agricultural sector reforms and capitalization of unexploited water resources.

At present agriculture consumes over 57% of Israel’s total water utilization while employing
approximately 2% of the workforce and accounting for only 1.8% of GNP while in Jordan
agriculture is estimated to use 73.9% of the total water consumption, employing 5% of the
workforce for a return of 2.8% of GDP. These extremely poor economic returns for water are the
result of significant government subsidies for water being used in agriculture and the lack of
education and incentives to better conserve water resources. These practices enable massive water
diversion at unreasonably low prices, which leads to the widespread misuse of our most scarce
resources in the region - water. Government subsidies facilitate the cultivation of inappropriate crops,
such as tropical fruits, which need excessively large amounts of water for this region. Without
independently studying the opportunities of better water management in the region, an outcome of
the RDC project will be to further encourage unsustainable water practices. Introducing more
efficient agricultural practices will dramatically reduce the strain on existing water resources and
increase the feasibility of regenerating the flow of the Jordan River.

Demand management reforms can be accompanied by exploitation of under utilized sources of water;
reuse of treated sewage water, desalination and yet untapped groundwater. Former Israeli Water
Commissioner Professor Dan Zaslavski has estimated that regenerating the flow of the Jordan River
to bring water to the Dead Sea will cost no more than $800 million, substantially less than the $5 - 15
billion it is estimated that will be required to complete the RDC project. In addition to the
comparatively low cost, the regeneration of the Jordan River will in itself deliver hundreds of
millions of dollars worth of benefits each year as the Jordan River has immense historical, cultural
and natural values and its unexploited value for tourism is significant.

These factors indicate in the opinion of FoEME, that it is advantageous to include in the RDC project
an independent study of the feasibility of restoring the flow of the Jordan River as a means of halting
the decline of the Dead Sea. Consideration of this course of action should be given in the ToR so that
decision makers and the general public are fully informed of their options in dealing with the difficult
situation that the region finds itself in with respect to water.

**Ancillary Advantages of the Jordan River Alternative**

Other benefits in rehabilitating the Jordan River include:

- Rehabilitating the Jordan River is a commitment of the Peace Treaty signed in 1994 between
  Jordan and Israel.
- The ‘Peace Dividend’ described in the ToR in relation to the RDC project would be
  substantially greater in any initiative to revitalize the Jordan River. The banks of the Lower
  Jordan River, which constitute the border between Jordan, Israel and the Palestinian West

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4 ‘Socio-Economic Condition.’ Royal Scientific Society/Environmental Research Centre, Page 6
5 Israel Central Bureau of Statistics, “Agriculture in Israel, Table 12: Water Production and Consumption by Source and Purpose,” latest
figures are from 2004.
8 World Bank national accounts data, and OECD National Accounts data files, 2005.
9 Professor Dan Zaslavski, “The water Level in the Dead Sea and the Two Seas Canal,” October 2006, p.4 -5.
Bank, have become a closed military zone. By working together to revitalize the River the area could be opened up for controlled sustainable development given its immense historical, cultural and religious significance as well as its natural beauty.

- Opportunities would be created for joint tourism development among Israelis, Jordanians and Palestinians, which will further reinforce any 'Peace Dividend'.
- A Jordan River option would safeguard the cultural, religious and historical value of the Jordan River Valley and the Dead Sea while the RDC project ignores the Jordan River.
- The financial cost of rehabilitating the Jordan River could be significantly less than the cost of the RDC project.\footnote{10}
- There would be a sizeable net environmental gain from rehabilitating the Jordan River and the Dead Sea with no negative environmental implications. This must be compared to the significant risks associated with the RDC project.
- There might also be a sizeable financial gain from rehabilitating the Jordan River in terms of tourism revenue in both the Jordan Valley and the Dead Sea.

What does the World Bank ToR say in relation to the Jordan River?

The introduction to the ToR states that "the natural flow of the Jordan River is fully appropriated for what is considered essential use by the various water sectors." The World Bank position could not be stated in the ToR more unequivocally. "No degree of reform and change in management of freshwater resources in the region is likely to keep pace with the demand, attain even the minimum standard of water availability or significantly contribute to the restoration of the Dead Sea."\footnote{11}

The Terms of Reference do however include a requirement that "The Technical Steering Committee shall provide the Consultant with a report on alternatives/options that have been proposed, studied and/or are being undertaken under a variety of initiatives to arrest the Decline of the Dead Sea. The report will include water management measures and/or water conservation measures and options such as expanded use of treated wastewater and brackish waters and desalination in order to meet the current and future demands for water. The report will discuss whether the option of increasing Jordan River flows to the Dead Sea is or will be attainable taking into account all considerations…"\footnote{12}

Considering the categorical statement against the Jordan River option in the introduction to the ToR it might seem surprising to see a willingness to study the option later in the text. A full and careful reading of the ToR explains what would otherwise appear quite confusing.

On all other issues throughout the ToR it is an independent consultant hired by the World Bank that is involved in either carrying out or scrutinizing all aspects of the report. This last paragraph mentioned above relating to alternatives at the regional level is the only 'task' given to the consultant that does not mention any independent research, study or review and ability to scrutinize. Since twelve out of fourteen members of the Technical Steering Committee are Jordanian, Israeli and Palestinian government representatives, it is in fact the beneficiary parties themselves who will be wholly responsible for preparing information on the Jordan River alternative. It is therefore no wonder that the World Bank is comfortable to appear accommodating to the Jordan River option since it stripped any notion of independence and transparency from the relevant section of the ToR, tying the hands of the independent consultant to accept government findings and integrate them into the report without any questions asked. No independent consideration is given to project alternatives other than different RDC alignments and the no project option in the Feasibility Study.

A study that claims to have saving the Dead Sea as its primary objective without any independent examination of the root causes of the problem and an investigation into whether those causes can be mitigated as a means of addressing the problem, in the opinion of FoEME puts the credibility of the World Bank into question.

\footnote{11} Terms of Reference, paragraph 1.2.
\footnote{12} Terms of Reference, paragraph 13.1.19.