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## Water

In memory of Dr. Fadia Debes

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## Preamble

- **It is agreed**  
that the mutual rights of Palestine and Israel in the shared water resources are recognized and respected.
- **It is agreed**  
that the Parties are entitled to just and fair entitlements of the shared water resources.
- **With the aim**  
of achieving a just and fair entitlement from the shared resources, the Parties agree to a rightful re-division of these resources.
- **It is agreed**  
that the rightful re-division of the shared water resources shall be assessed in the spirit of equitable sharing as outlined in international law and state legislation and practices to meet their needs.
- **The Parties to this agreement**  
are both aware of the harsh reality of the limitations in the total amount of good quality water in Israel and Palestine. These amounts will not be sufficient to meet the long-term needs of Israel and Palestine together. Both countries will have to devote considerable and urgent efforts to protecting, preserving and conserving existing water sources, reducing excess water use and waste and assuring investments to increase the total amount of water resources, particularly by sea and brackish water desalination, purified wastewater recycling and reuse, and hopefully in an era of regional peace, by other projects for the import of water from other neighboring countries.
- **It is agreed**  
and recognized that all water supply and development projects must be founded on a rational economic basis with adequate pricing.

- **The Parties recognize**  
the critical importance of their limited trans-boundary water resources and the need to enhance the rational use and conservation of the said resources on a long-term basis. They further recognize that increasing populations, as well as industrial and agricultural development, are placing much greater demands on water supplies, and that these demands call for adequate water management responses by both Parties.
- **This agreement**  
shall require certain changes and modification in Palestinian and Israeli laws and regulations as appropriate, and the Parties to the agreement shall assure that those changes and modification shall be carried out by the appropriate legal procedures required in each country in a reasonable period of time after the signing of the agreement.

# 1.

## Scope

This agreement shall apply to:

1. The water resources defined as shared in this agreement are: the Western sub-aquifer of the Mountain Aquifer, the North Eastern/Harod/Beit-Shean sub-aquifer of the Mountain Aquifer, agreed upon portions of the Eastern sub-aquifer of the Mountain Aquifer, portions of the Coastal Aquifer opposite Gaza and the lower Jordan River including the Dead Sea, as defined in clause 3.6.
2. Other activities that have or are likely to have an impact upon such water or their systems; and
3. Measures for the protection, preservation and management of such water or their systems.

## 2. Definitions

### 1. Depletion

The withdrawal of water from an aquifer at a rate faster than it is recharged, otherwise known as “mining” the aquifer.

### 2. Harm

Damage or any detrimental consequence of a human activity such as, inter alia, (a) loss of life or personal injury; (b) loss or injury to property; (c) the costs of reasonable measures to prevent or minimize such loss or injury; (d) environmental harm, including the costs of reasonable measures to prevent or minimize such harm, and the costs of reasonable measures of reinstatement or restoration of the environment actually undertaken or to be undertaken. Under customary law, each of the Parties to this agreement has a duty to take all reasonable measures to prevent causing significant harm to the other Party, including pollution or contamination of their water resources.

### 3. Safe Yield

The amount of naturally occurring renewable groundwater that can be economically and legally withdrawn from an aquifer on a sustained basis without impairing the native groundwater quality or creating an undesirable effect such as environmental damage. It cannot exceed the increase in recharge or leakage from adjacent strata plus the reduction in discharge, which is due to decline in head caused by pumping.

### 4. Vital Human Needs

According to international laws and norms.

### 3.

## Just and Rightful Re-Division of Water

1. It is agreed that the water rights of both Parties are mutually recognized and accepted.
2. In this spirit Israel and Palestine agree on a just and rightful re-division of the shared water resources which would in effect reduce the share that Israel had used in the past and increase the Palestinian share. The goal of this just and rightful re-division of the shared water resources is to help meet the needs of the Palestinians and to help improve their quality of life.
3. This rightful re-division shall take into consideration the spirit and principles of international law and of relevant factors and criteria, such as, among others:
  - a. Geographic, hydrographic/hydrological, climate and ecological factors;
  - b. The reasonable vital human needs of the Parties;
  - c. The reasonable social and economic needs of the Parties and their socio-economic level, including the assurance that there shall be adequate pricing of water to promote rational use;
  - d. The population dependent on the trans-boundary waters in each Party;
  - e. Existing and potential uses of trans-boundary waters;
  - f. Conservation, nature protection, and avoidance of unnecessary waste;
  - g. The contribution to the formation and recharge of the aquifer or aquifer system;
  - h. Technical and financial capabilities of each Party;
  - i. Availability of alternative resources available to the Parties of comparative value;
  - j. The practicability of compensation.
4. It is noted that in the spirit of recent developments in international water law, in weighing all of the above factors, priority should be given to meeting vital human needs. In the application of the above the Parties shall enter into consultation in the spirit of cooperation.
5. The just and rightful water re-division of good quality potable water to the Palestinians shall include:
  - a. The wells, springs and infrastructure from the areas in Israel being transferred to Palestine in the land swap in the framework of the permanent status peace agreement.

- b. Additional amounts of water, from shared water resources including agreed upon portions of the Western sub-sections of the Mountain Aquifer, agreed upon portions of the Eastern sub section of the Mountain aquifer, agreed upon portions of the North Eastern/Harod/ Beit Shean sub-section of the Mountain Aquifer, agreed upon portions of the Coastal Aquifer opposite Gaza and agreed upon portions from the lower Jordan River. However, Palestinian water rights from the above and on the Jordan River shall be limited as defined below.
6. The total amount of quality water resulting from the re-division under this agreement which shall become available to the Palestinians shall reach a total of \_\_\_\_\_ \* \_\_\_\_\_ MCM/Yr, of which:
  - a. \_\_\_\_\_ MCM/yr from sub-sections of the Mountain Aquifer;
  - b. \_\_\_\_\_ MCM/yr from portions of the Coastal Aquifer opposite Gaza;
  - c. \_\_\_\_\_ MCM/yr from the lower Jordan River.
7. The total amount of quality water shall be based on the hydrological and climatic conditions existing in the year of the signing of the agreement which shall serve as the base year.
8. It is understood that this re-division of the waters from the shared resources shall result in an equivalent reduction by Israel in the utilization of water from the shared resources.
9. In order to allow Israel sufficient time to reorganize its internal water allocations as a result of the diminished supply resulting from the re-division of water, Israel shall reallocate the water to the Palestinians in three stages: 50% of the agreed upon amounts with the signing of this agreement, and the additional amounts in two additional stages within a period of no longer than five years after signing the agreement.
10. The additional amounts of water shall be made available to the Palestinians as follows: The Palestinians shall be able to increase the pumping of existing wells and springs as agreed upon in this agreement or dig new wells as agreed upon and approved in the agreed upon areas in Palestine, which will pump the agreed amounts of additional water. The areas and the wells and springs and the amount of extraction agreed upon from each water source shall be clearly defined by the Parties.

11. Israel shall likewise reduce its pumping of the same aquifers and water sources on its side of the border by the agreed upon amounts. Pumping rates from all wells, springs and rivers on both sides shall be recorded and shared by both Parties to verify conformity with the agreements. There shall be agreed upon joint inspections of the pumping rates of the wells.
12. If there are any purchases of water or wastewater between the Parties, they shall be done at the legitimate cost price. All water shall be supplied at real costs including opportunity costs.



## **4.**

### **Avoid the Causing of Significant Harm**

1. Both Parties shall take all appropriate measures to avoid the cause of significant harm to the other Party as a result of water utilization or development.
2. Where significant harm is caused to one of the Parties, the Party responsible for causing the harm shall take all appropriate measures to eliminate or mitigate such harm, and where appropriate to discuss the question of compensation.

## **5. Flexibility in Water Allocations**

It is realized that, for hydrological and climate reasons, there is great variability from year to year in the availability of water resources in the area. It is agreed that the quantitative amounts of annual reallocated water specified in this agreement shall be based on the average safe yield of the specified base year of this agreement and the rainfall and recharge rates of that year. In case of reduced or increased rainfall and water yields, the possibility of a reallocation or re-division of water shall be considered and adjusted accordingly by the Joint Water Commission.

## 6. Joint Water Commission

1. A Joint Water Commission (JWC) shall be established under this agreement and developed in stages. The first stage shall be an agreed upon limited management body which assures the management of a high level of cooperation between Israel and Palestine, particularly on matters dealing with assuring the efficient and equitable management of the shared water resources to prevent over-utilization, to prevent and control pollution, to assure water quality, and to protect and conserve nature and environmental sustainability. After a period of five years the two Parties shall reevaluate the functions of the Joint Water Commission and issues pertaining to the joint water management, and shall consider proposals for improving, modifying and possibly developing its authority to a second, and more advanced stage.
2. The JWC shall have seven members. Each Party shall appoint three members (for a total of six). These six members shall appoint by consensus a seventh member, who shall be a qualified water professional and shall act as a neutral chairman and be of another nationality. The chairman shall be appointed for a period of three years.
3. The main functions of the Joint Water Committee in the first stage shall include:
  - a. **Re-adjusting the rightful re-division of water based on significant changes in hydrological and climatologic conditions in deviation from those of the base year.**
  - b. **Monitoring and Inspection of Water Withdrawals from Shared Water Resources.** It is agreed that in order to assure and guarantee the fair division and agreed upon utilization of the shared water resources and to prevent unregulated over-utilization of the water resources, both Parties agree to a detailed, strict and enforceable regime of determining, approving and recording the allowable pumping rates from every well, spring and other water source with regular detailed monitoring shared by both Parties. There shall be an agreed upon mode of joint inspections to validate the correctness and reliability of such monitoring and to detect unauthorized water extractions including making aerial photos.

- c. **Monitoring and Inspection of Water Pollution Impinging on Shared Water Sources.** In order to assure protection and conservation of the shared water resources of the Parties, there shall be agreed upon mode of joint inspections of all possible pollution sources which may impact on shared water sources.
  - d. **Monitoring and Inspection of the Quality of Water from Shared Water Sources.** In order to assure and verify the quality of the water supplies of the shared water resources of the Parties and to assure early warning of impending water quality degradation and health threats, there shall be an agreed upon mode of joint inspections.
  - e. **Harmonizing Standards and Guidelines for the Treatment Disposal and Control of Liquid and Solid wastes** from Domestic/Industrial and Agricultural Sources, including wastewater recycling and reuse.
  - f. **Writing Regular Reports.** The Joint Water Committee shall, on a quarterly basis, conduct a review of the water quality and quantity control measures taken within each Party's territory affecting the trans-boundary water and issue regular reports.
  - g. **Preparing Emergency Plans.** The JWC shall develop appropriate plans and procedures for emergencies requiring joint action such as *Drought Alerts, Drought Emergencies, Depletion Plans* and *Public Health Emergencies* and promulgate the corresponding plans in accordance with the provisions of this Agreement.
  - h. **Establishing Technical Committees.** The Joint Water Commission can consider, as deemed needed, the creation of Technical Committee/s either on a long term or an ad hoc basis.
  - i. **Establishing and Maintaining a Database as defined in clause 7.**
4. Functions which shall not be allocated to the Joint Water Commission are:
- a. The reallocation of water resources other than in cases resulting from changes in hydrological or climatologically conditions. If an agreed upon need arises to modify such allocations for other reasons, a special bi-lateral inter-governmental mechanism shall make such decisions with the mutual agreement of the governments of both Parties.

- b. The setting of water prices within the jurisdictions of the Parties to the agreement.
- c. The Joint Water Commission should not have any authority which conflicts with the existing laws and sovereignty of either country and existing peace agreements.
- d. The Joint Water Commission shall not deal with relations between the central governmental water authorities in each of the countries and the local or village water authorities.

## **7. Establishment and Maintenance of the Database**

1. The Joint Water Commission shall be charged with the creation and maintenance of a comprehensive and unified database pertaining to trans-boundary ground-waters, in the languages of the Parties. The database shall include an inventory of all trans-boundary groundwater resources taking into account quantity, quality, aquifer geometry, recharge rates, interaction with surface waters, and other pertinent data. The database shall identify all trans-boundary aquifers.
2. In order to assure the work of the database, at the request of the Joint Water Commission, the Parties shall:
  - a. Install in their territory the required measuring equipment, and protect such equipment from interference.
  - b. Permit and facilitate inspections by the Commission of such equipment.
3. The Parties shall undertake to facilitate the acquisition of information and data by the Joint Water Commission on a timely basis in accordance with the Joint Committee's requirements.
4. The Joint Water Commission shall compile, analyze, and disseminate the data, information and studies, and provide the results to their respective governments.
5. Access to the database shall be assured to the two Parties and to all legitimate research personnel and agencies, local and international.

## **8. Establishment of Central Water Pollution Control and Quality Assurance Agencies**

1. Each Party to this agreement shall establish a Central Water Pollution Control and Water Quality Assurance Agency and shall legislate agreed upon guidelines and standards so that they be legally binding and enforceable in the territory of each Party (similar to the requirements of the European Union on environmental standards). Each Party to this agreement agrees to vigorously enforce these guidelines and standards within their territory, with an appropriate water pollution control organization, with adequate budget and with due diligence.
2. The Parties to this agreement are aware of the need to urgently initiate investments in wastewater treatment and wastewater recycling and reuse to control and minimize serious pollution of the shared ground-waters that are utilized by both nations. Both are committed to work in cooperation on all pollution control and prevention matters on the shared aquifers ,particularly in cases of environmental emergencies and pollution threats, to protect the health and welfare of both nations.

## 9. Regular Exchange of Data and Information

1. Both Parties shall, on a regular basis, exchange readily available data and information on the condition of their transboundary waters or water systems, in particular of a geological, hydrogeological, hydrological, meteorological and ecological nature and related to the hydrochemistry of the aquifers or aquifer systems, as well as related forecasts.
2. Where knowledge about the nature and extent of a transboundary water or their systems is inadequate, the Party concerned shall employ its best efforts to collect and generate more complete data and information relating to such water or water system, taking into account current practices and standards. They shall take such action individually or jointly and, where appropriate, together with or through international organizations.
3. If one Party is requested by the other Party to provide data and information relating to an aquifer or aquifer system that is not readily available, it shall employ its best efforts to comply with the request. The requested Party may condition its compliance upon payment by the requesting Party of the reasonable costs of collecting and, where appropriate, processing such data or information.
4. The Parties shall, where appropriate, employ their best efforts to collect and process data and information in a manner that facilitates their utilization by the other aquifer states to which such data and information are communicated.



## 10. Dispute Settlement

1. In the event of a dispute between the Parties concerning the interpretation or application of the present Article, the Parties shall, in the absence of an applicable agreement between them, seek a settlement of the dispute by peaceful means.
2. If the Parties cannot reach agreement by negotiation requested by one of them, they shall jointly seek the good offices of, or request mediation or conciliation by, a third Party, or make use, as appropriate, of any joint watercourse institutions that may have been established by them or agree to submit the dispute to arbitration.
3. If no resolution of the dispute is reached by the above voluntary procedures it is agreed that the Parties must then submit their dispute for final adjudication and resolution to compulsory arbitration whose ruling shall be binding and obligate the Parties.

## **11. The Geneva Accord Map of Borders and the Jordan River and Dead Sea**

This water article assumes that the agreed upon final borders are those outlined in the Geneva Accord Maps. Thus, the Palestinians have legitimate riparian rights on those areas of the Lower Jordan River and the Dead Sea contiguous with their territories. However, the quantity of water to be decided on for the re-division will include defined and specific annual quantities of water from the Mountain aquifer, surface sources and from the lower Jordan River.

## **12. Future Plans and Programs**

In the future, the two Parties shall consider the possibility of developing plans to declare *Trans-boundary Groundwater Conservation Areas*, allowing the two Parties to work together on both sides of specially defined border areas to promote conservation and pollution prevention. This may require changing appropriate laws of the Parties.

