

FROM CONFLICT TO PEACE BUILDING

**TRANSBOUNDARY STREAMS –
INTERNATIONAL MASTER PLAN PROJECT**

CONCEPT NOTE



February 2010

Introduction

Within Israel and the West Bank and Gaza Strip (WBGS) there are numerous streams that cross the Palestinian/Israeli Green Line. Most of these are major streams that flow year-round in a westward direction toward the Mediterranean Sea while a smaller number flow east to the Dead Sea or the Jordan River. All of them originate in joint watersheds and they are all in need of upgrading. Some are highly polluted, posing a health hazard to users; all endanger flora and fauna and are unfit for recreational or consumptive uses.

The problem

The sewage of over 2.8 millions people of both Palestinians and Israelis who live above the Mountain Aquifer is not adequately treated and finds its way into streams and wadis, percolating into the groundwater. Sewage from most Palestinian cities and villages receives no treatment at all. The sewage of many Israeli settlements in the West Bank is not treated adequately, or even at all. As a result, many natural springs and wadis have been contaminated, and evidence of pollution in deep groundwater has already been detected. Continued pollution would lead to the destruction of large parts of the Mountain Aquifer



. Wastewater has major health, environmental, and economic consequences..
Much of the fertile lands around the streams are not being farmed and

landowners have been forced to find other ways to make a living. The resulting pollution of the surrounding environment and groundwater in the area endangers existing water sources. The polluted surface water constitutes a health hazard to agricultural lands and local residents, tourists and visitors.

Objective

The main objective of this concept note is to develop a master plan for transboundary streams as a joint Israeli-Palestinian effort to combat the threat of pollution and serve as a data base and guideline to protect the public and the environment from basin pollution. The second major objective is to involve the general public in the decision making process and set up a public participation and volunteer framework to care for the streams. A third major objective of the project is to improve coordination in water decision-making such as in river basin management.

Approach and Methodology

The Mountain Aquifer is the source of major streams and rivers in Israel's coastal area, including the Yarkon, Taninim, Hadera and other streams. The confined area is located further down the slopes, beneath an impermeable layer of rock. Most wells and water extraction sites are located there. For the past 15 years, Israelis and Palestinians have deliberated solutions to protect the groundwater and the surface water from pollution, these solutions including rehabilitation and beautification some of these streams or building and operating a joint sewage purification plants to. There have been a number of meetings between Palestinian and Israeli held as decided in the Oslo Accords of 1995. Israel and the Palestinian Authority set up a Joint Water Committee to resolve water and wastewater issues in a formal setting. Suggestions have been made to the JWC for a solution to the sewage problem in the Streams, but a solution has not been found.

Things are changing, however. During the last few years, professionals and politicians from both sides of the border held workshops and organized conferences to discuss the problems of the Streams and to present the idea of a Master Plan. In order to agree and develop the master plan, a joint

Master Plan steering committee should be set up, comprised of Palestinian representatives, and Israeli representatives. The unique structure of the steering committee should comprise not only NGO's and academic institutions, but also statutory bodies, will assure a plan that will be not only diverse and comprehensive, but also practical.

The proposed collaborative work between Israeli and Palestinian experts represents an unprecedented opportunity for setting up a framework for collaborative integrated basin management between the two parties for a shared water resource in a place of enormous historical, cultural, and ecological importance and beauty. There is no alternative to collective action when managing a shared international basin. This requires water management on the basin scale regardless of political borders. Nature, ecosystems and the intricate interaction between water, climate, soil, flora and fauna can only be protected by collective action.

This is not theoretical approach, but it is an actual planning process, based on the successful model of the Yarqon River Master Plan in the Tel Aviv region, which converted the Yarqon River and its environment from an environmental nuisance into a beautiful recreational area. The bi-national team of professionals will use the skills developed in the Yarqon to create a Master Plan for all transboundary wastewater streams. The steering committees will create and guide a team of Israeli and Palestinian professionals who will act in concert to develop the Master Plan.



The team will consist of a plan coordinator, planners, hydrologists, engineers, archaeologists, ecologists, economists, jurists, sociologists, agronomists and public awareness specialists. Additional experts will be brought in as needs change. The selection of the team members will be done jointly by the steering committee in order to create a balanced, realistic and useable Plan. Regular meetings between the project team and the steering committee will develop lines of communication for project feedback.

The major beneficiaries of the Master Plan are the residents around the streams, as well as the surrounding environment in the region. Improved planning, land usage and infrastructure will make the life near and around these streams better and encourage the tourists to visit.

When implemented, local farmers will benefit from effluent which, when treated sufficiently, can provide irrigation for crops and animals in an area, increase the water resources and create new jobs and additional employment opportunities due increasing tourism. Also tourists, hikers and other visitors will benefit from the restoration of the natural beauty of the region.



Description of the Master Plan and its Effectiveness

The Master Plan will present a number of possible scenarios based on current and expected land and water use and will detail how best to utilize the resources of the streams while preserving its historic value. In addition, these

discussions will bring together local and regional stakeholders as well as planners and local authorities to discuss their visions of the streams. This joint effort will exemplify the ability of both parties to coexist and work together to solve mutual problems.

Like most things in the Middle East, solving problems always has political undertones. Creating a master plan for the Streams is interpreted by some people on both sides as recognition of Israeli or Palestinian sovereignty. For forty years, a temporary political situation has been in place in the region, and deterioration of the mountain aquifer is just one result. The researchers, both Israeli and Palestinian, recognize that a master plan, based on ecological, historical, physical, economic and geographical terms agreed upon by both sides will serve the best interests of the Streams, regardless of present or future

Political Sovereignty

The creation of the first master plan for a joint Israeli-Palestinian water sources will be a breakthrough in Palestinian-Israeli cooperation. Step by step, once one of those streams is completed, it can serve as a blueprint for similar plans for other cross-boundary waterways which are desperately in need of rehabilitation.

As a starting point for reclamation, a survey of the Israeli and Palestinian stakeholders involved is of vital importance. The survey will identify the issues, interests, priorities and characteristics of the various stakeholders and stakeholder representatives, and the relationships between the different stakeholders and stakeholder groups. The information gathered by this research will inform the planners as to the needs of the stakeholders. Meetings will be held to become acquainted with the stakeholders, determine their vision for the streams and to serve as nuclei for further discussions in developing the Master Plan. Involving the public strengthens the democratic and participatory aspects of decision-making, and the resulting consensus lends greater commitment to the implementation of outcomes.

A comprehensive study of the Streams's geography, history and ecology will be carried out. Every portion of the Streams will be studied, from drainage and runoff to sewage and solid waste disposal. A study will be made of the endemic species of fauna and flora in the Streams; agricultural methods and crops, industry and arts and crafts. All this information will be compiled into an Outline Plan that includes the region's historical, ecological, tourist and agricultural aspects and identifies the issues, concerns and problems of all Streams that need to be addressed by the Master Plan.

One of the major problems to be tackled is treating the sewage. Without purifying the effluent flowing in the streams there can be little environmental enhancement. For years, Israel and the Palestinian Authority have debated the creation of sewage treatment plants in the Streams. In the past, several plans for sewage treatment were developed under the auspices of different government authorities. These plans will be collected and brought to the attention of the stakeholders for their evaluation. The team will work towards achieving agreement on a workable plan.

A subsequent plan for proper distribution of the treated water to the various riparians in the Streams will then be developed. This includes the issue of a "dry" or "wet" wadi- should water continue to flow year-round, or should the streams return to its previous state as an intermittent stream?

The planners will then work to coordinate a Master Plan that takes into consideration future land use planning. The Master Plan will consider reduction of environmental degradation; water quality and effluent treatment; use of the water that flows in the stream; rehabilitation of the river's ecosystem including flora and fauna; development of parks and pathways for leisure and recreation; reconstruction and rehabilitation of historic sites; designating land usage including protected areas, farmland, open spaces, parks, business and residential areas; and the establishment of a visitors center.

It will detail investment opportunities as well as the roles and responsibilities of the various agencies which will be involved in the implementation of the plan and the management of the resources of the Streams.

The Master Plan will introduce to regional planning integrated water resource management (IWRM), whereby land use, water use and the environment will be managed holistically, social and economic needs will be balanced with the needs of the environment, and decision-making will be coordinated between the local, regional and national levels.

Planning for water resources management requires that long term trends (such as population growth and water use), upstream/downstream, and scale related issues are all addressed within a coherent framework. Scenario building is a planning tool which supports good decision-making based on a systematic and consistent examination of possible trends and the impact if those trends. It will be used to develop objectives and actions that use appropriate methodologies for good water and land management.

Sustainability of the Master Plan

Creating a joint Israeli Palestinian Master Plan entails several risk factors. One major risk is failure of the team to reach agreement on a particular phase of the project. This in turn could create tensions, halt progress, or even cause the project to fail to reach its goals. This risk will be minimized by several measures. First, the team members selected are not only experts in their fields, but also have experience in working on joint Palestinian Israeli projects of a similar nature. They are familiar with the many successes and failures in attempts at joint action. Secondly, the ground rules of the project recognize that the Master Plan will be based on ecological, historical, physical, economic and geographical factors that serve the best interests of the Streams, regardless of present or future political considerations or sovereignty.

The many issues to be discussed in creating the Master Plan require the input and agreement of national government officials in general and the Joint Water Committee in particular. This is especially true when deciding on the placement of the wastewater treatment plant and the planned uses of the treated wastewater. Their inability to reach decisions could hamper progress on these two important issues, and even spread to other areas of the Master Plan. This risk will be minimized by keeping government officials informed of the project and its progress throughout the entire process. In addition, the Master Plan will be structured to enable separating the wastewater treatment and reuse options from the rest of the Plan.

Our goal is to not only develop a Master Plan, but to do so while incorporating the principles of basin management, including transparency, dialogue and public involvement at and between all levels. This is not something to be taken for granted in an area of conflict without much experience in using these principles. Suspicion and resistance may arise at different levels, and frustration and disappointment when expectations and reality collide.

The Master Plan is a blueprint for the common future of the Streams developed together by Israelis and Palestinians in coordination and in consultation with stakeholders from both entities and from all levels. It reflects a common vision that will improve the quality of life for the residents of the Streams and visitors, both environmentally and economically.

This will be the first Master Plan for a transboundary streams in the region. When completed, this Master Plan will serve as a model for other Palestinian-Israeli transboundary streams and rivers, as well as a starting point for continued cooperation within the basin itself.