

תכנית אב לאגן נחל קדרון - ואדי אל נאר
مخطط عام لحوض وادي النار
KIDRON VALLEY- WADI EL NAR MASTER PLAN PROJECT

KIDRON VALLEY-WADI EL NAR MASTER PLAN PROJECT ENGLISH SUMMARY



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תכנית אב לאגן נחל קדרון - ואדי אל נאר - מטרת אל נאר - מטרת אל נאר
מטרת על: אגן הקדרון - מרחב איכות בין העיר העתיקה, מרכז ירושלים וים המלח

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Kidron Valley - Wadi El Nar Master Plan Project - Goals of the Plan

Guiding Principle: The Kidron Basin - A quality area between the Old City, central Jerusalem and the Dead Sea

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| 1. The Kidron Basin Plan in scenarios: co-existence, cooperation, partnership | 7. Strengthening the connection between the ridges and the stream bed, between built-up and open space- "the Kidron matrix" |
| 2. Solving the Kidron sewage problem | 8. Developing leisure activities, sports and recreation |
| 3. Involving the community and empowering the population | 9. Creating tools for long term management and development of the basin |
| 4. Creating a "biosphere" - An area that balances between development and preservation | 10. The plan as a catalyst for fund raising |
| 5. "The Stream as a Bridge": Between Political Entities and Cultures Between Societies, populations (about 250,000 today), communities and neighborhoods | 11. Implementation in stages while developing the plan- Steering Committee, Drainage Authority, City of Jerusalem |
| 6. Creating a tourist area and preserving historical sites- "The Valley of the Holy City" | 12. The Master Plan as a basis for an action plan and statutory plans |

KIDRON VALLEY- WADI EL NAR MASTER PLAN PROJECT

Chairman of the

Steering Committee: Prof. Richard Laster

Members of the Steering Committee:

City of Jerusalem: Naomi Tsur, Deputy Mayor
Arch. Shlomo Eshkol, City Engineer
Gil Reichman, Environment

Dead Sea Drainage Authority: Gery Amel , Director
Eng. Avi Freund

Ministry for Environmental Protection: Shony Goldberger
Dr. Amir Erez

Jerusalem Institute for Israel Studies: Israel Kimhi

Peres Center for Peace: Oren Blonder

Milken Institute: Prof. Glenn Yago

Head of the Planning Committee: Arie Rahamimoff Liora Meron
Architects and City Planners
Laure Dachy - Rahamimoff Architects
Gregory Katz

Planning Committee:

Law and Administration: Adv. Dani Livney- Laster Goldman Law Offices

International Law: Dr. Robbie Sabel

Environmental Economics: Dr. Boaz Barak

Demographics and Society: Planner Israel Kimhi - Jerusalem Institute

Drainage and Sewage: Eng. Ilan Helbetz - Lavi Natif

Hydrology : Prof. Eliahu Rosenthal

Transportation: Marc Render- Amav Transportation Planning

Landscape Architecture: Arch. Vardit Tsumamal - Tsumamal-Turner

Ecology: Dr. Ram Almog - Kayma

Archaeology, Heritage And Tourism: Avner Goren

Community Planning: Planner Muhammed Nakhal

Mapping: Dr. Ram Almog - Kayma

Drainage: Dr. Eng. Nimrod Halamish, Afik

* Arch. Sinan Abed El Khader, planner of the Arab A-Saraqwa neighborhood

The following pages are an introduction to the Master Plan, describing the challenges faced and the methods used in its development. We hope to translate the entire Master Plan into English and Arabic in the near future.

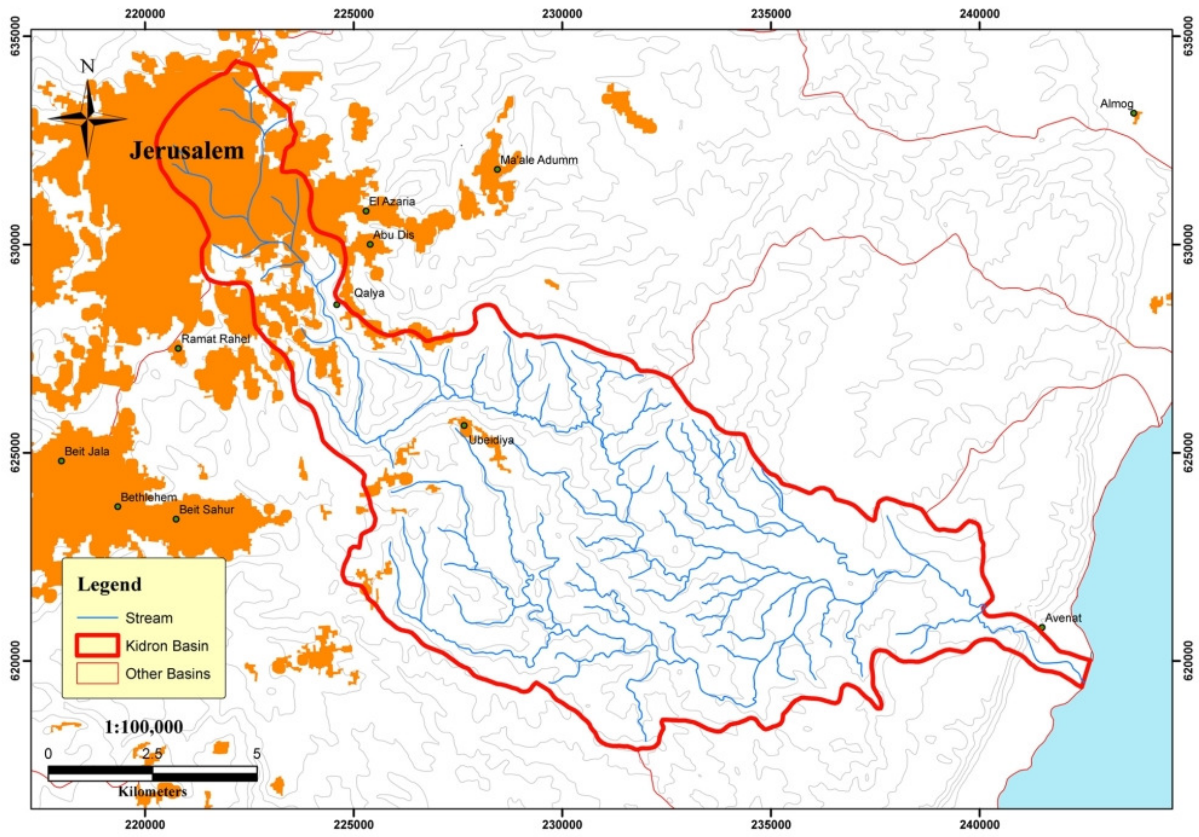
SYNOPSIS

The Kidron Valley/Wadi Nar begins in the Jerusalem neighborhoods of Meah Shaarim and Talbieh, skirts the ridges of Mount Scopus and the Mount of Olives, passes through Silwan and continues through the Judean Desert to the Dead Sea. Some of the Middle East's most famous cultural, religious and historic sites dwell in harmony in the valley, along with ancient tombs, underground watercourses, monasteries and breathtaking desert landscapes. Unchecked development and neglect, however, together with an increase in population, has had major health, environmental, and economic consequences. Today one of the great centers of civilization serves as a conduit for raw sewage and a depository of solid waste.

In 2009 the Dead Sea Drainage and River Authority decided to meet the challenge, and with the City of Jerusalem, set up a steering committee together with representatives from the Ministry of Environment, the Peres Center for Peace, the Jerusalem Institute for Israel Studies and the Milken Institute to oversee the development of a Kidron Valley/Wadi Nar master plan. The steering committee put together a planning team, comprised of architects and land use planners, hydrologists, engineers, archaeologists, ecologists, economists, jurists, sociologists, agronomists, environmentalists, transportation experts and public awareness specialists.

The master plan, completed in January 2012, identifies the issues, concerns and problems of the Kidron Valley/Wadi Nar and recommends solutions. A master plan, based on ecological, historical, physical, economic and geographical terms agreed upon by both sides will serve the best interests of the Valley, regardless of present or future political sovereignty issues. There is no alternative to collective action when managing a shared international basin. Nature, ecosystems and the intricate interaction between water, climate, soil, flora, fauna and people can only be protected by collective action.

The major beneficiaries of the Master Plan are the Valley residents themselves, both the citizens of Jerusalem, Bethlehem, Ubadiya and the other towns in the region, as well as the region's Bedouin and monks. Improved planning, land usage and infrastructure will convert the Kidron Valley/Wadi Nar from the back door of history to its rightful place as a showcase for residents and visitors alike.



Map of Kidron/Nar Basin



Aerial View of Lower Kidron and Dead Sea
Kidron Master Plan Team

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KIDRON VALLEY/WADI NAR INTERNATIONAL MASTER PLAN

Integrated Water Resource Management Under Conditions of Conflict: Moving from Co-existence, via Cooperation to Partnership

CONCEPT NOTE

Relevance of the Master Plan Project

The Kidron Valley/Wadi Nar begins in the Jerusalem neighbourhoods of Meah Shaarim, Talbieh and the central business district, skirts the ridges of Mount Scopus and the Mount of Olives and continues through the Judean Desert to the Dead Sea. For thousands of years, the valley supplied the local population with water from the Gihon springs, prompting the growth of several civilizations in and around Jerusalem. The Middle East's most famous cultural, religious and historic sites dwell in harmony in the valley, along with ancient tombs, underground watercourses, monasteries and breathtaking desert landscapes.

Unchecked development and neglect, however, together with an increase in population, has had major health, environmental, and economic consequences. Today one of the great centers of civilization serves as a conduit for raw sewage and a depository of solid waste. Water and drainage infrastructure is primitive at best. Historic sites are neglected; their cultural value depreciated by poor environmental practices and strife in the region. Endemic species are disappearing. Much of the fertile lands in the Valley lay fallow and landowners have been forced to find other ways to make a living. The polluted surface water constitutes a potential health hazard to Dead Sea bathers and local residents, and seepage of the sewage into the groundwater in the area endangers existing water sources.

For the past thirty years, Israelis and Palestinians have deliberated solutions for the rehabilitation and beautification of the Kidron/Wadi Nar area, including building and operating a joint sewage purification plant. There have been a number of "historic meetings" such as the one between Teddy Kollek, the Mayor of Jerusalem and Elias Freig, the Mayor of Bethlehem in 1991. Portions of the sewage have been diverted, but most of the sewage just keeps "rolling along".

As part of the Oslo Accords of 1995, Israel and the Palestinian Authority set up a Joint Water Committee to resolve water issues in a formal setting. This committee has met continuously

since 1965, even during periods of outright conflict. Yet the JWC has failed to find a solution to the sewage problem in the Valley, as political issues cloud the decision making process. In addition, unlike Europe where borders are coming down, here borders are going up, making basin planning even more difficult.

Yet, there is no alternative to collective action when managing a shared international basin. This was recognized by the EU Water Framework Directive of 2000, which requires management on the basin scale, regardless of political borders. Nature, ecosystems and the intricate interaction between water, climate, soil, flora, fauna and homo sapiens can only be protected by collective action.

Several years ago scholars from Israel, Germany and the Palestine Authority studied the Kidron basin and compared its management mechanisms with the Elbe River in Europe. The result of this study was an application to the Dead Sea Drainage and River Authority by several members of the study team to copy the basin management structure adopted in Europe, and prepare a basin plan for the Kidron/Wadi Nar. The Dead Sea Drainage and River Authority accepted the challenge and, together with the City of Jerusalem, set up a steering committee, comprised of representatives from the Ministry of Environment, the Peres Center for Peace, the Jerusalem Institute for Israel Studies, the Milken Institute, the City of Jerusalem and the Dead Sea Drainage Authority. The steering committee appointed Arie Rahamimov and Liora Miron, architects and planners, to oversee the planning process.

The planning process adopted was based on the successful model of the Yarqon River Master Plan in the Tel Aviv region, which converted the Yarqon River and its environs from an environmental nuisance into a beautiful recreational area. The Kidron/Wadi Nar Basin Master Plan moves the planning process one step further, into the realm of international basins. In the Kidron/Wadi Nar Basin, there are no less than four legal jurisdictions in a desert stream 28 kilometers long. In addition, the Palestine Water Authority refused to sit on the steering committee due to the complicated status of Jerusalem. The planning team, however, presented the draft plan to the chair of the PWA and his staff and worked closely with staff members during the planning process.

The sensitivity of the process and its convoluted nature required a planning team with skills that go beyond a mastery of their profession; the team members had to be open to new cultures, languages and legal codes. Long hours of hard work, an esprit de corps developed during hikes down the Kidron, and chemistry with stakeholders in the basin, has created a Master Plan that

meets the needs of future generations while recognizing the political and ecological fragility of the area. The steering committee acted with skill and diplomacy in guiding the professional team, and had the patience to meet with scores of stakeholders, each with his/her own agenda. One cannot underestimate the contribution of the steering committee to the success of the plan. The planning team comprised architects and land use planners, hydrologists, engineers, archaeologists, ecologists, economists, jurists, sociologists, agronomists, environmentalists, transportation experts and public awareness specialists. An important component of the team was the appointment of Muhammad Nakhal, a resident of East Jerusalem, who created a liaison between the Palestinian residents in Jerusalem and its neighbouring cities. In addition, the close association with Dr. Amjad Aliewi, of the House of Water and Environment, added an additional element of connection with the Palestine Authority, due to Dr. Aliewi's advisory capacity to the Palestine Water Authority and his openness to new ideas.

The process

At the outset, the steering committee allocated one year for the planning process. This principle decision was made to make the team aware of the fact that a master plan process is one of concepts. It looks at the big picture, finding the stumbling blocks to failure and the keys to success. The planning team set dates for quarterly reports to the steering committee and the stakeholders, and met the schedule as planned.

The professional team worked as a unit. The heads of the team, Arie Rahamimov and Liora Miron, designed working meetings and hikes in and around the Kidron to neutralize disciplinary restrictions, so disruptive to a planning process. After several months of planning, the team honed in on the major stumbling blocks and mapped out the keys to success.

As a starting point for reclamation, a survey of the Israeli and Palestinian stakeholders was conducted. The survey identified 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 informed the planners as to the needs of the stakeholders, making the process stakeholder driven. Meetings were held to become acquainted with the stakeholders, determine their vision for the valley 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 Valley's geography, history and ecology was carried out. Every portion of the Valley was studied, from drainage and runoff to sewage and solid waste disposal. A study was made of the endemic species of fauna and flora in the Valley; agricultural methods and crops, industry and arts and crafts. A study was conducted on the potential economic benefits of a properly managed basin, showcasing the area's cultural, scientific, and ecological heritage to the world. All this information was compiled into an Outline Plan that includes the region's historical, archaeological, ecological, tourist and agricultural aspects and identifies the issues, concerns and problems of the Kidron Valley/Wadi Nar.

Stakeholder Involvement

The planning team mapped out a list of over 80 stakeholders in the Valley, comprised of Palestinian and Israeli members of government, both local, national and regional, NGO's, and the Civil Administration of Israel. It is impossible to get full input from 80 stakeholders, but the steering committee and the planning committee met with the stakeholders individually and at the stakeholder meetings held during the planning process. The meetings were dedicated to short presentations of the plan outline, with time for the stakeholders to relate to it. Keeping in mind that the master plan is a concept plan, not a detailed planning process, the stakeholders were able to concentrate on concepts: how to rid the basin of sewage and solid waste, how to create local entrepreneurship, pilgrim trails; environmental education in the basin, etc. The feedback gave the steering committee both the direction and the backup to make its final report.

Heroes

No plan can be successful without its heroes. There are several that stand out. The first is the Mayor of Obadia, Suleiman Abdalla el Assa. Obadia is a village around 10 kilometers south east of Jerusalem. It is the last human urban settlement in the Valley before the Dead Sea. Its importance is that it could serve as a catalyst to rid the Kidron of sewage. The Palestine Authority and the mayor of Obadia would like to build a modern waste water treatment plant in Obdia and use the treated effluent for agriculture. The mayor has gone to no ends trying to help rid the Kidron of sewage. He has met with Israelis and Palestinians and has agreed to serve on the joint basin committee set up as part of the Master Plan. He stakes his political future on the success of the plan; in this region, no small feat.

Another stakeholder worthy of mention is Naim Awissat of Jabal Mukaber. Jabal Mukaber is a small village, now incorporated in East Jerusalem overlooking the Kidron. Naim is a "self

made" man who started out as a "bag boy" in a supermarket and rose to run several bag boy operations in eight supermarkets in West Jerusalem. From there he won a tender to operate a public bus system in Jabal Mukaber and now owns a fleet of 17 buses. He then set up, owns and operates a health care center in Jabal Mukaber and is now engaged in community work to improve the lot of his neighbors. He set up a non profit association to raise money for environmental education, recycling and traditional agriculture. He sets an example of local entrepreneurship and community development, so important to the success of the implementation of the master plan.

Finally, another "mover and shaker" in the Valley, Safa Alien, a young Palestinian woman who completed her studies in environmental sciences at the Hadassah College in Jerusalem Safa spearheads the East Jerusalem project for environmental education in several schools with thousands of students. She works out of the center for environmental education set up in Tsur Baher by Fuad Abu Hamed, and hopes to reach out to all the schools in the area. Safa also works on the empowerment of Palestinian women, and it is young people like Safa, who will make a change in the region.

Successes

During the planning process, it was decided to implement initiatives that were ripe for picking. This was done in several areas. The first is the creation of the environmental education initiative. Due to the fact that East Jerusalem has been neglected by the city of Jerusalem for years, there are tons of trash discarded near roads and open areas around the Kidron. Two planning team members, Ram Almog and Dan Livney, suggested that there be an environmental education center set up in East Jerusalem so as to serve as a focus for incorporating simple principles of recycling, rain water harvesting, composting etc. in Palestinian schools. Almog and Livney met with Fuad Abu Hamed, a businessman in his own right, but also a community activist, and Fuad had his non profit organization serve as the umbrella for this initiative. Safa Alien was hired to run the program and the center was dedicated in May, 2011 with the Deputy Mayor of Jerusalem, Naomi Tsur present and other local dignitaries.

A football field for East Jerusalem

Although the Jabal Mukaber football team leads the Palestine Authority football league, it has had no field to practice or play on for years. Due to the initiative of Naim Awisat and the help of Shlomo Eshkol, the city engineer, and Gil Reichman, head of the Jerusalem environmental unit, Naim received a permit to build the first football field in east Jerusalem. This initiative could not have occurred without the master plan team's intervention.

A boulevard for East Jerusalem

The American Road or Sheik Sayed is the main road in East Jerusalem. It was built by the Americans over sixty years ago, and hasn't seen much improvement since. Due to the intervention of the planning committee, the road will be redeveloped into a boulevard for East Jerusalem.

The creation of a basin commission

A major purpose of the master plan process was the creation of a basin commission similar to the commissions set up in Europe under the EU Water Framework Directive. During the planning process, a non official commission was created, with members from the cities of Jerusalem and Obadia, representatives of the Palestine Water Authority and the Israel Water Authority, the Gihon (Jerusalem's local water and sewerage association) and the Dead Sea Drainage & River Authority. This new commission has no directorate, nor does it have staff members etc., but this budding initiative is the most important element needed for governance of the Kidron. It will serve as the sounding board for implementation of the Master Plan, and, in time, it may develop into a formal Basin Commission.

Failures

The major failure of the plan was getting cooperation on removal of the sewage. Tremendous steps have been made to hone in on the stumbling blocks to success. During the planning process, numerous meetings were held with the Israel and P.A. Water Authorities and their representatives, as well as the mayors of Jerusalem, Bethlehem, Abu Dis, Suwahra and Obadia. Yet there are still "sovereignty" issues blocking the solution. As of this writing, the Kidron basin committee discussed above has approached the JWC to build a sewage pipe from Jerusalem to Obadia, as a first step in river regeneration.

Immediate and long term goals

The immediate goals of the plan are to find financial backing for its implementation. Using the

Yarqon Master Plan as an example, there the Government made a decision to invest in upgrading the Yarqon River over a period of ten years. With the Kidron, money is needed to finance the operation of the Basin Commission, to develop a proper feasibility study for sewage treatment, reuse and removal. The same is true for solid waste, especially building waste which prevents enjoying the full potential of the Valley.

A second immediate goal is the creation of pilgrim paths for all three monotheistic religions, as well as bicycle paths and hiking paths. These paths need to be coordinated with the stakeholders in the Valley. Third is upgrading the American Road (Sheikh Sayed), making it a true boulevard for residents and visitors to Jerusalem. The long term goal is to remove the untreated sewage from the Valley, develop its full tourist potential, while keeping its ecological integrity. A second long term goal is to use the Kidron as a platform for scientific cooperation under the aegis of the LTSER program (Long Term Social & Ecological Research). River basins make wonderful stations for research and the Kidron, which has already set up a platform for stakeholder interaction fits the needs of LTSER like a glove.

For forty years, a temporary political situation has been in place in the region, and deterioration of the Kidron/Wadi Nar is just one result. A master plan, based on ecological, historical, physical, economic and geographical terms agreed upon by both sides will serve the best interests of the Valley, regardless of present or future political sovereignty issues. It is time that the parties dealt with primary issues rather than dither over final status equations.

The Master Plan process has introduced 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

The major beneficiaries of the Master Plan are the Valley residents themselves, both the citizens of Jerusalem, Bethlehem, and the other towns in the region, as well as the region's

Bedouin and the monks of the Mar Saba monastery. Improved planning, land usage and infrastructure will convert the Kidron Valley/Wadi Nar from the back door of history to its rightful place as a showcase for residents and visitors alike.

When implemented, local farmers will benefit from effluent which, when treated sufficiently, can provide irrigation for crops and animals in an area with little freshwater resources and limited jobs. Tourists, hikers and other visitors will benefit from the restoration of the natural beauty of the region, its cultural and historic sites, and from increased access. Increased tourism will in turn create additional employment opportunities for the local population. Pilgrims will once again be afforded access to the world's most important religious icons and sites.

When embarking on this process, the Steering Committee hoped that the creation of the first master plan for a joint Israeli-Palestinian water source would be a breakthrough in Palestinian-Israeli cooperation. Furthermore, the committee felt that once the plan was completed, it would serve as a blueprint for similar plans for the other 15 cross-boundary waterways which are desperately in need of rehabilitation. This has turned out to be true. Until the master plan process commenced, there was no transboundary committee for river regeneration, nor was there cooperation between Jerusalem and Obadia, and there were no environmental education programs in place in East Jerusalem. Finally, the directors-general of three other River and Drainage Authorities have agreed in principle to work with their partners in the Palestine Authority to develop a master plan in their jurisdictions.

A Master Plan incorporates 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 exercising 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 Kidron Valley/Wadi Nar 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 of dignity for people and the environment to improve the quality of life for the residents of the Valley and visitors, both environmentally and economically.

Introduction to the Master Plan

Arie Rahamimoff and Liora Meron

Preparation of the Kidron Valley Master Plan has ended after a year of work by a multidisciplinary planning staff in developing a general idea, discussing major planning issues and beginning the detailed job of implementation.

The planning committee has presented the guiding principle of the project- *The Kidron Basin - a quality area between the Old City [of Jerusalem], central Jerusalem and the Dead Sea* and 12 secondary goals including ways to promote these goals, as follows:

1. The Kidron Basin Plan in scenarios: co-existence, cooperation, partnership.
2. Solving the Kidron sewage problem.
3. Involving the community and empowering the population
4. Creating a “biosphere - An area that balances between development and preservation.
5. “The Stream as a Bridge”: between political entities and cultures, between societies, populations (about 250,000 today), communities, and neighborhoods.
6. Creating a tourist area and preserving historical sites- “The Valley of the Holy City”
7. Strengthening the connection between the ridges and the stream bed, between built-up areas and open spaces- “the Kidron matrix”.
8. Developing leisure activities, including sports and recreation.
9. Creating tools for long term management and development of the basin.
10. The plan as a catalyst for fund raising.
11. Implementation in stages while developing the plan- Steering Committee, Drainage Authority, City of Jerusalem.
12. The Master Plan as a basis for an action plan and statutory plans.

Throughout the planning process the master plan has been presented to government representatives, municipalities, planning and research agencies, NGO's, representatives of the US government, a range of different sectors of the Kidron population and stakeholders in three special meetings.

The planning committee presented to the steering committee 73 potential initiatives for the entire Kidron area. These initiatives cover a large range of issues: ecology and environment, development and building, landscape and open areas, transportation and infrastructure, archeology, heritage and tourism, agriculture, employment and commerce.

An emphasis was put on choosing initiatives that will evenly cover the entire basin both in terms of the geographical area and the different topics that the Kidron Project concerns.

During one of the later stages in the planning process of the project the planning committee prioritized the initiatives into a list of 12-14 initiatives that in our opinion are of higher priority, due to their chances to succeed and the significance of their impact on the area. Six of these initiatives have already been started. The last initiatives include a solution to the sewage problem in the valley, by promoting alternative options through building a sewage treatment plant, preparing a plan for drainage and surface run off management, environmental education, developing the American Road, simple technologies for waste and sewage treatment and building a soccer stadium for the East Jerusalem population.

Special attention has been given to the issues of sewage flowing in the Valley. Both the steering committee and the planning committee believe that a good solution to the sewage problem will substantially advance the development of the basin, while not solving this problem in this critical time will further neglect and cause more severe deterioration of the valley.

The numerous meetings held by member of the planning committee and the steering committee with central figures from Israel and the Palestinian Authority gives hope that it is possible to promote processes that will lead to a solution to the sewage problem in the Kidron within a reasonable time through the construction of a sewage treatment plant in Ubadiyah or by transferring the sewage to a plant that will be built in Nebi-Musah. It is of critical importance to persevere in promoting this issue and reaching a practical solution.

Another area that the planning committee addressed is developing initiatives that will improve the economic base of the Kidron residents and the environment in which they live, while integrating public involvement and appropriate community planning.

The different initiatives combine to form a "synergetic shell" that is based on a wide and multidisciplinary view. Our evaluation is that an intensive and continuous effort to implement these initiatives in the near future will create the conditions for significantly improving the Kidron area and bringing it closer to becoming the high quality area that it deserves.

The transition from general planning to implementation is critical for the success of this important process of developing and protecting the Kidron. All of those involved in promoting this project – the initiators, the steering committee, the planning committee and all the stakeholders, are needed to make the required efforts and to ensure the continued progress and implementation this project.

Short Term Kidron Business Initiatives January, 2011

Ecology and the Environment

1. Treating building waste and fill
2. Disposal of household waste
3. Environmental education centers
4. Simple technologies for treating waste and raw sewage
5. River Regeneration

Vistas and open spaces

6. Parks and gardens
7. Kidron trail

Transportation

8. Public transportation
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Ecology and Environment - An Overview of the Current Situation

Dr. Ram Almog, Geographer and Environmental Planner

The Kidron Basin-Wadi El Nar spreads from its top corner in the center of Jerusalem, through the Judean Desert and ends at the Dead Sea. The Kidron is seasonal stream, and geographically most of the Kidron is within a desert region. The combination of extreme gradient climate with the unique geological structure of the Judean Desert creates a series of matchless ecological webs and stunning views, starting from Mediterranean type areas through to the unique desert region the length of the Dead Sea.

According to several historical sources, throughout human history this area has always maintained a balance between developing human culture and existing landscapes, especially at the head of the basin, and preserving the natural view and landscape. However in the past few decades, this precarious balance has been breached. Due to a lack of attention on the side of the municipalities in charge of the area, the area has been neglected, which has led to effacement of the unique beauty of the basin and especially the upper reaches of the basin. In practice, since the annexation by Israel of East Jerusalem in 1967, the Kidron basin has been completely neglected. Currently, one of the world's most important heritage sites is abandoned and neglected in an unprecedented manner. One of the most serious hazards is the sewage that flows freely in the streambed, mostly from within the Jerusalem municipality. Downstream additional sewage from Palestinian towns enters the Kidron, from the Eastern parts of Bethlehem and Beit Sahur, Ubadiyah and from parts of El-Azariya and Abu-Dis. In addition to the sewage being an environmental and health hazard, it is also a contaminant risk to the eastern mountain aquifer and the Dead Sea. The sewage flow in the Kidron basin is a serious ecological hazard that endangers plants and animals and destroys the unique desert features of the area.

In addition to the sewage problem, over the years this area has become the "backyard" of Jerusalem and the surrounding towns, including Abu-Dis, Ubadiyah and other towns. The East Jerusalem neighborhoods have been turned into a huge garbage dump, especially for building waste. Add to all this the poor infrastructure around the upper part of the basin, caused in part by unauthorized building in East Jerusalem and partially by the lack of resources the Jerusalem Municipality and the State of Israel provides for improving the infrastructure, some of which still exists from the period of Jordanian rule. All of the above seriously diminishes the quality of life of the population living on the basin and destroy much of the historical value of the basin.

In addition to the concentration of hazards that affect the upper part of the basin, there are additional hazards and nuisances that appear the length of the basin that constitute environmental, ecological and landscape nuisances. In the lower Kidron are two inactive sewage treatment plants: retention ponds in the Hurqania Valley, and an abandoned sewage treatment plant in on the He'etekim cliffs. In the past two years a sewage diversion system was constructed in the Hurqania Valley, including a series of settling ponds just before the stream enters the Hurqania valley. From this point, the sewage is piped northward to the Jordan Valley settlements, where it is used for irrigation. It is important to emphasize that this system is a serious environmental and ecological hazard, and cannot replace a sewage treatment system that functions according to recognized legal standards, especially in light of the ecological sensitivity of the Kidron Valley and the surrounding area. Another serious hazard is caused by the extensive use of Hurqania Valley by the Israeli army for training maneuvers, resulting in serious damage to the soil and large quantities of metal waste and more littering the landscape. Similar to the sewage flowing in the stream, this intensive usage of the area results in an ecological barrier within the Judean Desert in general and within the Kidron Valley in particular.

Planning a Sewage Treatment Plant

Professor Richard Laster and Adv. Dan Livney

The saga of Jerusalem's sewage is indeed grist for a historical novel of several hundred pages. It took years to build a modern waste water treatment plant (WWTP) for sewage flowing west to the Mediterranean Sea. Sewage originating in the eastern catchment, which flows in the Kidron, is still awaiting treatment after 150 years of heavy urban settlement. For years, authorities have discussed and even planned the site of a joint WWTP. In fact, in 1991 the mayors of Jerusalem, Bethlehem and Beit Jala worked out an agreement for treating sewage from the western side of the watershed at the Soreq treatment plant, which continues to this day. They attempted to do the same for the Kidron sewage in 1994-5 by building a joint WWTP in the upper Kidron, near Obadia. The German government, at that time heavily involved in developing cooperation between Israel and the Palestinian Authority, had approved funding for the plant's construction. The mayors of Jerusalem and Bethlehem had given their approval. But in the end governments refused to sign the contract, claiming construction of the plant was tied to sovereignty.

Since the failed German-sponsored WWTP, the need for action has been raised from time to time, with no results. When the Israel Environment Ministry threatened the City of Jerusalem with legal action if nothing was done, the Jerusalem water company quickly put together several alternative plans for sewage treatment. These plans included building a WWTP within the city limits, pumping the sewage over the watershed divide westward to the Soreq WWTP, or pumping the sewage northward to a plant at Nebi Musa, in the Og catchment. A fourth plan, which is a combination of the other proposals, would pipe the sewage along the Kidron, and then north to Nebi Musa along the Horkania plateau. These plans were designed not to remove the sewage from the Kidron, but to reduce pressure from the Minister of the Environment.

The plans described above were based on the premise that there was no Palestinian partner. The master plan process proved otherwise. Once the master plan process began in earnest, the music changed and work began in earnest for a joint solution to the problem. It all came about as a natural result of following the theoretical model for integrated water management in a basin. A council was created with stakeholders from the basin: the cities of Obadia and Jerusalem, the Palestine Water Authority and the Israel Water Authority, Engineers Without Borders- Israel and Engineers Without Borders- Palestine, the Jerusalem company for sewerage and water (Gihon/Mafti), members of the Master Plan steering committee, and representatives of the U.S. State Department and the Israel Ministry of Foreign Affairs. As in all basin

committees, this one is representative of the key players in the basin and although it has no statutory power, it is connected to those players who do.

The Kidron/Wadi Nar Council has met on several occasions and is now implementing the master plan. Its first order on the agenda is the removal of sewage from the basin. In its latest meeting there was agreement to lay a sewage pipe from Jerusalem to Obadia as the first step in getting the sewage out of the Kidron channel. A group of engineers and planners from Israel and the P.A. have met to develop a joint plan for this effort.

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