Jordan River Peace Park

Summary of Charrette (Design Workshop)
with Yale University, Bezalel Academy and Palestinian and Jordanian architects
and Pre-feasibility Study
May 2008

May 12 – Mayor of the Jordan Valley Regional Council, Yossi Vardi, welcomes the architectural teams from the USA and Israel in his office. In attendance are other local stakeholders and media, both foreign and local. (Special thanks to Yossi Vardi and his office team)
The group toured the **Naharayim / Peace Island** site: from the viewpoint overlooking the dams and canals, a short walk along the dams, and then a bus tour onto the Peace Island. FoEME’s Amman Deputy Director, Abd Rahman Sultan, greeted the group on the Peace Island, exemplifying the ease with which Israelis and Jordanians can meet on this site, without the need for visas and passports. *(Special thanks to Ofer Levine and Naomi Shoshani)*
The group drove along the military road to view the Lower Jordan River, reaching the Gesher / Three Bridges site. We toured the area of the 3 bridges, the Khan and the customs house. Discussions followed with questions and answers by the media, the participating teams and local stakeholders. (*Special thanks to Ann, Sigal, Maya, Nirit and Omri*)

Opening the military gate at Gesher

The Roman Bridge over the Lower Jordan River
FoEME, Yale and Bezalel crossed to Jordan and met the Palestinian and Jordanian architects and a representative of the Jordanian team of EcoTech, who carried out the pre-feasibility study of the Jordan River Peace Park. A presentation of the *pre-feasibility study* was given to the entire group at Pella. (see below for a summary of several parts from the study).

**May 13** – The group toured the Jordanian side of the Park area, including the former **Rotenberg Hydroelectric power station**, the old workers’ homes, the present day military viewpoint (where Rotenberg’s “white house” used to stand), the headway canal, etc.

![The old workers housing complex – future ecolodges](image1)

![The power station as viewed from above](image2)
Visiting the grounds of the Rotenberg Power Station

Inside the turbine room
The group returned to North Shunah, broke up into 4 smaller groups and began to work on design ideas.
May 14 - 15 – continuation of charrette groups working on design ideas, culminating in conclusions and a presentation that incorporated all ideas gathered over the last few days.
Master plan as produced by the Charrette Design Team
May 15 & 19 – Events held in Amman and Jerusalem to present design ideas from charrette workshop and presentation of pre-feasibility study
Agenda
Jordan River Peace Park
May 15th, 2008
Wild Jordan Center, Royal Society for the Conservation of Nature, Amman

17:00  Reception

17:20  Welcome
Munqeth Meyhar, Chair and Director Amman Office, FoEME
Khaled Irani, Jordanian Minister of Environment (invited)
Natalie Brown, Economic Chancellor, U.S Embassy to Jordan

17:40  Overview of Project and Pre-Feasibility Presentation
Munqeth Mehyar, Chair and Director Amman Office, FoEME
Tanya Gorskay, Project Manager, EcoTech Jordan

18:20  Charrette Presentation
Alan J. Plattus, Yale University
Diana Balmori, Yale University
James Axley, Yale University

19:00  Panel Discussion and Questions and Answers
Mayor Ali Hussein Ali Alagi, Muaz bin Jabal
Representative of the King Abdullah II Fund
Yale University and FoEME Team Representatives

19:50  Closing Statements, FoEME
Agenda
Jordan River Peace Park
May 19, 2008
Van Leer Institute, Jerusalem

13:00 Reception

13:30 Welcomes and Pre-Feasibility Presentation
Gidon Bromberg, Director Tel Aviv Office, FoEME
Munqeth Mehyar, Chair and Director of Amman Office, FoEME
Zvi Efrat, Director of the Department of Architecture, Bezalel Academy
Luis G. Moreno, Deputy Chief of Mission U.S. Embassy to Israel

14:15 Charrette Presentation
Alan J. Plattus, Yale University
Jim Axley, Yale University
David Guggenheim, Bezalel Academy of Arts and Design

16:00 Panel Discussion followed by Open Discussion and Questions
Mayor Yossi Vardi, Regional Council Jordan Valley
Deputy Mayor Yoram Karin, Beit She'an Valley Regional Council
Aviad Sar Shalom, Environmental Consultant
Munqeth Mehyar, Chair and Director of Amman Office, FoEME
Michael Turner, UNESCO Chair, Urban Design and Conservation Studies

Moderated by Gidon Bromberg, Director Tel Aviv Office, FoEME

17:30 Closing Statements, FoEME
Jordan River Peace Park
Summary of Pre-Feasibility Study

Major points of the Pre-feasibility study are as follows:

Site opportunities and constraints:

Opportunities:
- Significant architectural heritage (Roman, Mamluk, Ottoman and Early 20th Century)
- Significant natural heritage (arid Mediterranean and wetland habitats)
- Opportunities for commemorating historical events (Battle of Yarmouk, Rotenberg project, Jordan Israel Peace Treaty)
- Scenic and recreational potential
- Livelihood opportunities for local communities

Constraints:
- Conflict of interpretation (political views in presentation of historical events, sour memories for Jordanians, symbol of Zionism)
- Costly renovation of power station complex

The park should be developed in stages:

Phase I
- flooding the lake area
- reconstructing worker’s homes into eco-lodges
- strengthening of the bridges
- trails
- railway station
- entrance gates

Phase II
- conversion of the Power Station complex into visitors / cultural center.

Phase III
- creation of cross border peace park / movement of security fence
- panoramas depicting cultural and historic events
- convention center and additional hotels.
Water Supply Options for the Lake

- Yarmouk River in winter
- Jordan River in summer (via zero canal)
- Treated Sewage Water as an additional option

Filling of the Lake:

Scenario 1:
- Lake Surface Area: 380,000 m²
- Lake Depth: initial depth, 30cm then increasing depth to 1 meter over a 5-year period
- Water Needs: initial volume of 722,000 m³ for filling and maintaining water body for the first year and 608,000 m³ for each additional year.

Scenario 2:
- Lake Surface Area: initial Area of 240,000 m² gradually increasing to 380,000 m²
- Lake Depth: corresponding to increase in area, increase depth from 30cm to 1m over a period of 5 years.
- Water Needs: 456,000 m³ to 608,000 m³

Financial Feasibility

- Capital Investments - Ten Million JD over 25 Years ($14M)
- Yearly running costs - Half Million JD
- Revenues from lodging, sales concessions (food, souvenirs), entrance fees, guides, transportation (bike rentals).
- Within 5 years expect 250,000 local visitors (Jordanian and Israeli)
- Within 10 years expect 200,000 foreign visitors.
- Financial feasibility will benefit from “green grants” and “soft loans” (low interest)

The Net Present Value:

- At 10% discount rate is JD 77,350
- At 3 % discount rate is JD 6,240,484.

Benefit-Cost Ratio:

- At 10% discount rate is 1.008.
- At 3% discount rate is 1.354
- Therefore, at a green discount rate costs could rise by 35% before the benefit-cost ratio would be driven to 1.

Sensitivity Analysis:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Cost increase by 10%</th>
<th>Revenue decrease by 10%</th>
<th>Cost increase by 10% &amp; revenue decrease by 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPV @ 3%</td>
<td>4,475,675</td>
<td>3,661,626</td>
<td>2,086,817</td>
</tr>
<tr>
<td>B/C @ 3%</td>
<td>1.231</td>
<td>1.218</td>
<td>1.107</td>
</tr>
<tr>
<td>Internal Rate of Return</td>
<td>7.68%</td>
<td>7.64%</td>
<td>5.38%</td>
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</tbody>
</table>
**Competitive Advantages**

- Novelty and uniqueness
- Baqoura is among the best preserved multi-ecosystem habitats in Jordan.
- Genuine interest from tourists, particularly Israelis, to visit the Power Station.
- Important sites of shared heritage; local, regional and world.
- Peace Park could serve as a core area with linkages to neighboring sites in Israel and Jordan. A tourism anchor for other sites in the area.

**Establishment of the Park**

- Designation of the Jordanian side as a National Park. Royal Decree required.
- Establishment of a joint Steering Committee to guide concurrent development and provide ongoing communication channels
- Establishment of Trans-boundary Peace Park with an independent financial and administrative body.

**Management Issues**

- Access Control
- Zoning
- Tourist Safety
- Responsibility
- Contingency Plans
Jordan River Peace Park
Summary of “Charrette” Design Ideas

Goals of the park:

- Contribute to and set an example for the rehabilitation of the Jordan River
- Promote sustainable tourism as an economic development engine for the region
- Protect and present the history of the site and its artifacts in a spirit of understanding and cooperation

Four gateways, each with its own characteristic and garden entrance:

- Wetland (Naharayim gate)
- River (Gesher gate)
- Arid Landscape (North Shuneh gate)
- Arid Agriculture (Bakoora gate)
CIRCULATION
PHASING
ZONES OF ACTIVITY

- Agriculture
- Yarmouk Lake & Wetlands
- Jordan River & Riparian Zone
- Cultural & Visitors Center
- Protected Habitat
- Development Zone
- Naharayim Gate
- Bakoura Gate
- Gesher Gate
- North Shounah Gate
ECOLODGES

Legend
1. Passport Control
2. Main Entry to Peace Park - ticket booth
3. Dining
4. Information Center - I.C.
5. Parking
6. Guest Services
7. Watering in Housing units and wheat fields
8. New Ecolodges and wheat fields
9. New Ecolodge Reception and Dining Building
10. Jordan Military Campus
11. New Ecolodges

Diagram of Wind Flow Across Site
Diagram of Cross Ventilation
Diagram of Existing House
Diagram of Proposed/Renovated House
OLD GESHER AREA

Legend
1. Passport Control
2. Long-term Parking
3. Existing Fish Ponds
4. Forest
5. Restaurant
6. Vehicular Drop-off
7. Information Center
8. Train ticket
9. Breadshop
10. Dining
11. W/C
12. Pavilion
13. Museum
14. Entry Ticket Booth
15. Bus pavilion
16. Marmauk Khan, rehabilitated as Outdoor Performance Theatre
17. Ottoman Customs House
18. Viewing Pavilion
19. Main Entry to Peace Park and Pedestrian Entrance across Ottoman Bridge
20. New Station Shop
21. British Police Station, rehabilitated as hotel or conference center