



Marjan

A New Vision for Kabul Zoo

Jon Coe Design, P/L 15 June 2010

Could Kabul Zoo become both an Afghan Centre for Wildlife Conservation and a Family Nature Park?

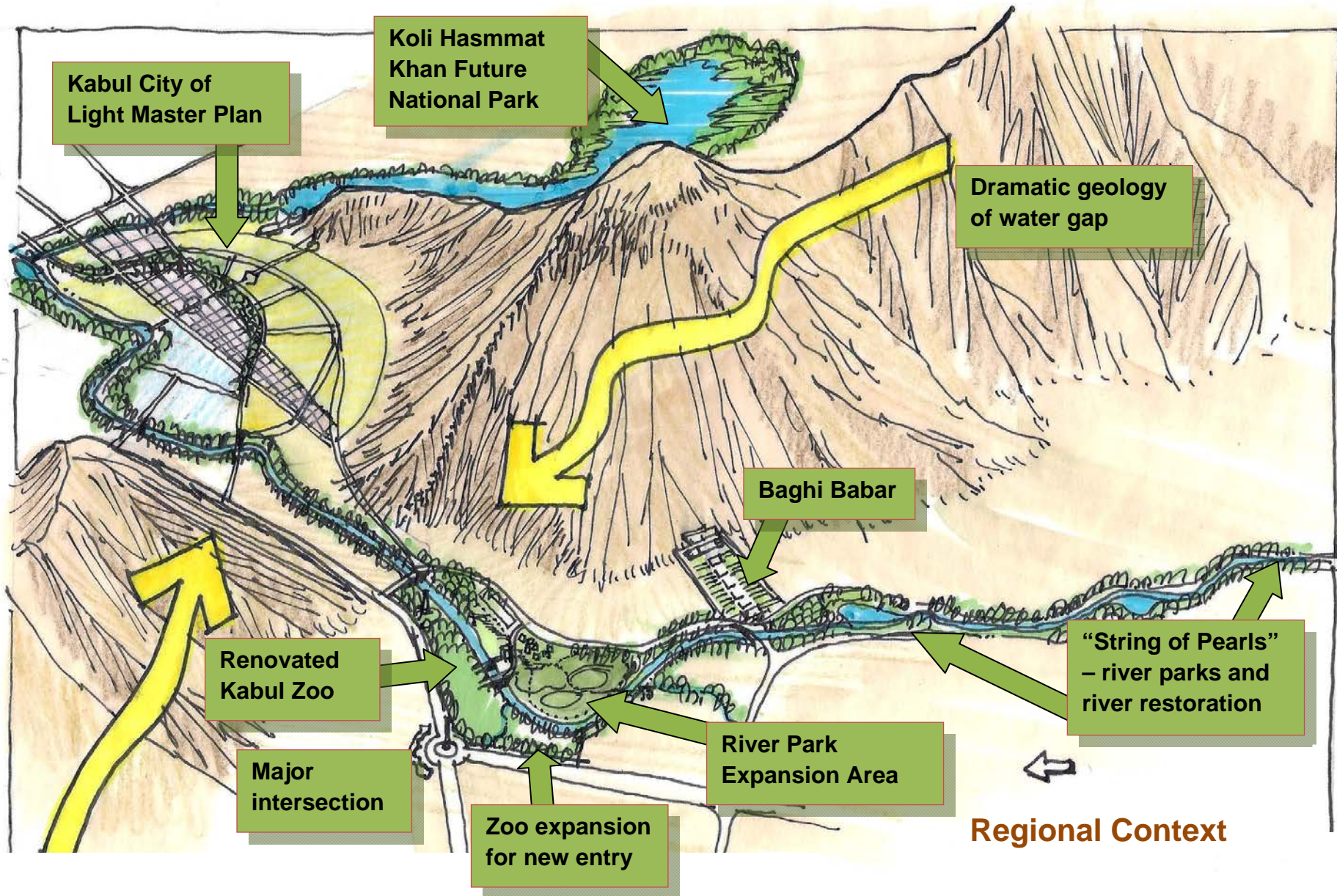
Introduction

A New Vision for the Kabul Zoo was prepared by Jon Coe Design P/L of Melbourne, Australia, with assistance from an informal Kabul Zoo Working Group composed of interested individuals from NEPA, UNEP, the US Embassy Cultural Affairs Section and the Wildlife Conservation Society (WCS).

H. E. Prince Mostapha Zaher, Director of Afghanistan's National Environmental Protection Agency (NEPA) informally encouraged development of a "vision plan" for Kabul Zoo. This occurred at a 25/02/10 Afghan Wildlife Executive Committee meeting chaired by Engineer Najib Yamin (NEPA), and attended by Mr. Andrew Scanlon, Protected Area Specialist for the United Nations Environment Program (UNEP) and Dr. David Lawson, Country Director for the Wildlife Conservation Society (WCS). Soon afterward H. E. Mohammad Younus Nawhandish, Mayor of Kabul, authorized acquisition of a significant area of land for zoo expansion adjacent to and across the Kabul River from the present zoo.

Kabul Zoo History

Kabul Zoo was established in 1967 by H. E. King Zaher Khan. According to the King's grandson, H. E. Prince Mostapha Zaher, the new zoo was envisioned to become a "conservation of wildlife centre and conservation flagship". Cologne and Bonn Zoos helped to plan and fund initial zoo development in the 1960's. In the 1980's and 1990's the zoo was almost completely destroyed. Marjan, the brave lion partially blinded during the conflict became a popular symbol of the people's capacity to endure and survive. Since then some funding and technical support has come from the Zoological Society of London, the North Carolina Zoo and the Zoo Outreach Group of Coimbatore, India. Recently the US Embassy, through its Cultural Affairs Section and USAID has provided a small amount of support to the zoo through the Wildlife Conservation Society, which has provided educational signage and other assistance. Dr. Stephan Ostrowski, WCS Veterinarian, provided animal health checks and veterinary staff training in 2009. Funding for the Education Centre, opened in 2010, was provided by the Economic Cooperation Organization (ECO) based in Tehran.



Regional Context

Kabul Zoo Today

Kabul Zoo serves as an important leisure and education facility for Kabul residents and domestic tourists. Although it is relatively small and does not presently meet international standards, the zoo enjoys an excellent location.

It is surrounded by dramatic geology where the Kabul River breaks through mountain ridges creating a narrow water gap. It is located on a major urban corridor between important cultural landmarks. The famous Baghi Babar Gardens are immediately upstream and the Mayor’s “City of Lights” downtown renewal area begins just downstream from the zoo.



View across expansion site



Kabul Zoo is an important opportunity to connect city children with Afghanistan's outstanding natural heritage.
Photo US Embassy, Kabul

The present site of about 3.7 hectares (nine acres) is well treed, with along frontage on the Kabul River and a major urban water channel. The Education, Aquarium and Animal Health Care buildings are new and many of the enclosures appear to have new wire mesh or are newly painted. Medical examinations by Dr. Ostrowski found the present zoo animals to be generally healthy. The highlights of the present animal collection include a lioness, three Syrian brown bears, two Asian moon bears and a large troop of Rhesus macaques, as well as a number of impressive vultures and eagles. All of these species are (or within historic times were) native to Afghanistan.

Across the river is a largely agricultural flood plain site of about 14 hectares (forty-four acres) designated for park expansion. There is also land of about 2.8 hectares (seven acres) fronting on the Abdul Wakeel traffic circle that is ideally suited for a new zoo entry, car park and related facilities.





Encourage positive interaction between families and wildlife as shown in this example from Woodland Park Zoo, Washington USA



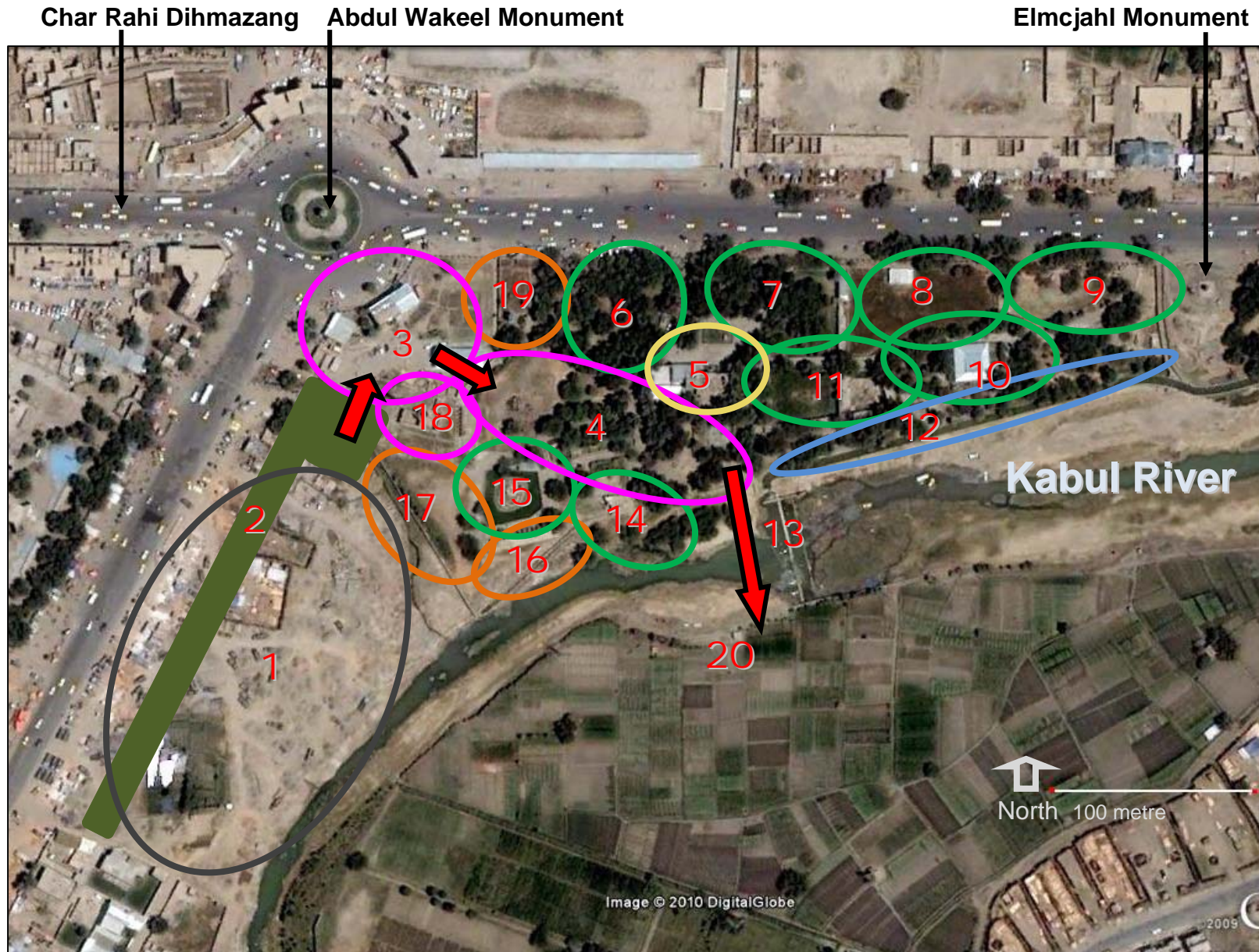
A new lion exhibit could build on Marjan's legacy.



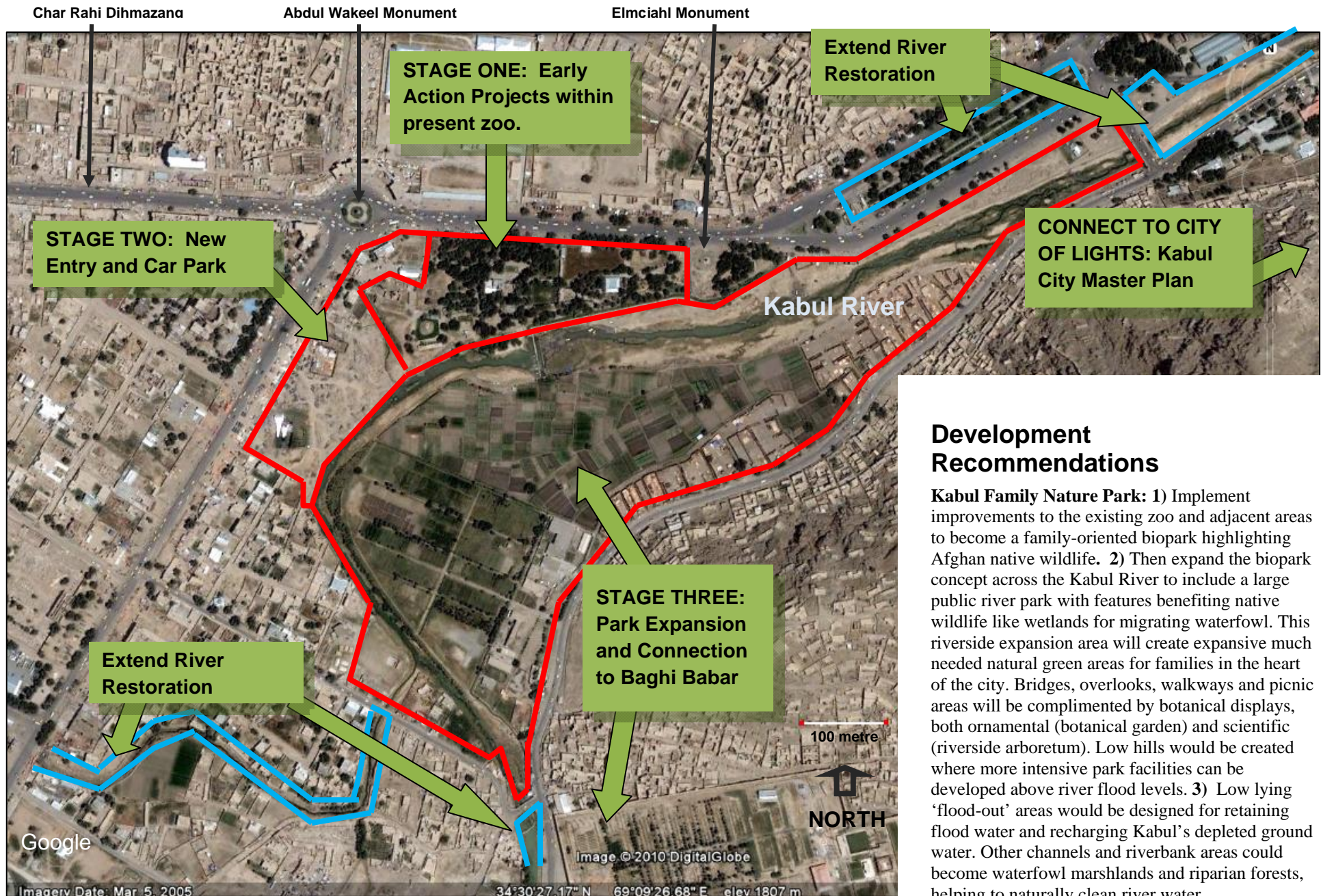
Syrian bears, like this European brown bear at Emmon Zoo, Holland, can be great crowd pleasers.

Preliminary Recommendations for the Kabul Zoo

Create a New Zoo and Family Biopark: Move beyond the limited concept of “zoo” and embrace the wider and more modern and ecologically-based concept of bioparks, integrating zoos, aquariums, botanic gardens, living museums, geology and culture. Emphasise the family as the core client, provide traditional attractions like picnic areas and gardens for dining as well as nature-based family attractions like a birds of prey free-flight show and children’s discovery areas.



Kabul Family Nature Park Vision Plan
Concept for Intermediate Development



Development Recommendations

Kabul Family Nature Park: 1) Implement improvements to the existing zoo and adjacent areas to become a family-oriented biopark highlighting Afghan native wildlife. 2) Then expand the biopark concept across the Kabul River to include a large public river park with features benefiting native wildlife like wetlands for migrating waterfowl. This riverside expansion area will create expansive much needed natural green areas for families in the heart of the city. Bridges, overlooks, walkways and picnic areas will be complimented by botanical displays, both ornamental (botanical garden) and scientific (riverside arboretum). Low hills would be created where more intensive park facilities can be developed above river flood levels. 3) Low lying 'flood-out' areas would be designed for retaining flood water and recharging Kabul's depleted ground water. Other channels and riverbank areas could become waterfowl marshlands and riparian forests, helping to naturally clean river water



Birds of prey are understandably popular and free flight demonstrations show their amazing aerial abilities.



Getting close to wildlife is educational and fun.

Focus on Afghanistan's Wildlife: **1)** Base the new zoo on the semi-arid ecosystems, plants and animals of Afghanistan. **2)** Encourage national pride in iconic native species like eagles and other birds of prey, as well as lumbering and curious great bears, active and social macaques and cute small creatures like marmot and pika. Lions once roamed the Afghan river forests and steppes and would provide a popular link to the famous Marjan. **3)** Large exotic animals like elephants and giraffes require specialized attention and large climate-controlled facilities and should not be acquired in early stages of redevelopment. **4)** Focus upon doing a relative few displays especially well. Avoid 'postage stamp' collections of interest only to collectors.

Ensure Sustainable Design and Operations: Make the new biopark a model for sustainable design and operation. For example, create 'living water' eco-san systems that use beautiful water gardens to safely and effectively treat effluent wastes. Use rooftops and paved surfaces to harvest rainwater and snow melt for reuse. Emphasise local building materials and skills.

Forge Links to Create a National Opportunity: 1) Use links to government and universities to explore the potential to become a central scientific, conservation and cultural resource for the entire nation of Afghanistan. 2) Create political support at the highest national levels, including NEPA and MoAIL. 3) Establish sustainable funding sources within the national government and donor community. 4) Develop effective ex-situ (at the zoo) animal breeding and research supporting protected area restoration initiatives and 5) Create zoo staff research and education opportunities at in-situ (in the field) protected area sites presently being developed throughout Afghanistan.

University Connection: Create a long-term partnership with Kabul University (or other premier Afghan universities) to insure the scientific qualifications of the zoo, as well as to develop training and research programs for both zoo staff and university students. Use the redevelopment process to maximize capacity development at all levels.

International Partnerships: Develop a long-term partnership with a major international zoo. Building a zoo of international quality is a multifaceted undertaking requiring a team of experts with overlapping specialities and long-term commitments. The best way to insure this is to partner with a leading international zoo, which would need to be paid for its efforts and expenses as a contracted consultancy. In this case, an innovative, conservation and education oriented mid-sized zoo located in an arid region would be the best choice. Such a partner may be located in India, the Arabian Peninsula or Australia, for example.

Animal Welfare Standards: 1) Establish and enforce advanced animal welfare standards. 2) Develop and maintain an active program of animal training and environmental

enrichment. 3) Where will the animals come from to restock the re-established zoo? It is essential that endangered species not be captured from the wild where they are already under extreme survival pressure. 4) An international partner zoo has the expertise to work through CITES and other required international permitting agencies to properly source and import zoo breeding stock and assist local zoo officials with these procedures. 5) This international zoo partner could also advise the appropriate Afghan government departments in formulating and reviewing their own wildlife management and importation regulations.



Eco-San biological water treatment facilities can also become attractive park features and habitats for native waterfowl.

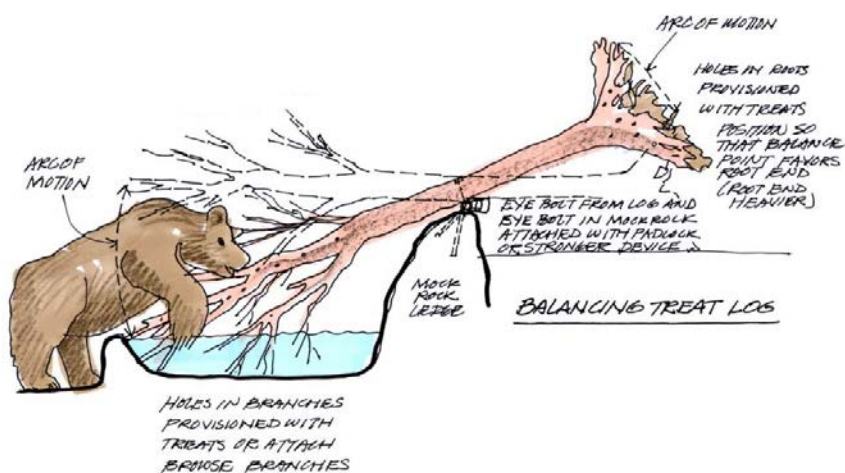
Restore and Celebrate the Kabul River: Not so long ago Kabul River was clean and beautiful. Use renovation of the old Kabul Zoo to begin environmental restoration of nearby areas of the Kabul River and adjacent canals using proven, modern, eco-san techniques and trash catchers. Eventually, stage by stage, expand this river restoration work up and down stream throughout the City of Kabul.

Create a ‘String of Pearls’ system of River Parks: Continuously add and restore riverside and floodplain land up and downstream from the present zoo to create and connect a system of parks stretching from Baghi Babar Heritage Gardens and above to Koli Hashmet Khan Marshlands, including riverfront areas in Kabul’s new and exciting “City of Light Master Plan.”

Moving Forward

Kabul Zoo would be redeveloped in multiple stages.

1) An Animal Welfare Specialist should be retained to train zoo staff in managing environmental enrichment programs for the zoo animals. This should commence at once and continue during zoo planning. This preparation will not only benefit zoo animals and interest zoo visitors, but will also help to prepare zoo animals and staff for coming improvements.



Simple environmental enrichment features can be fun for both zoo animals and visitors.

2) The Vision Plan: The preliminary recommendations of the informal working group are presented herein. It shows an exciting and integrated vision of what may be possible and provides a global perspective. If Afghan officials wish to proceed along the lines outlined, then funding requests for the immediate next stage should proceed along with surveys of existing and proposed land parcels and existing infrastructure.

3) Concept and Strategic Plan Workshop: A small specialist team should be recruited and contracted to advance the vision plan with active client participation. This team would establish the physical development concept, scope of work, terms of reference of the major participants, outline a business and management strategy and suggest overall projected cost and schedule for staged development. They should also identify early action projects needed at the Kabul Zoo. The team would work closely with the Kabul Zoo Director and senior staff as well as coordinating with representatives of the Kabul Mayor’s Office, National Ministries and other participants. This study would require a fourteen day intensive planning workshop period in Kabul followed by a six week period of consolidation and documentation in the consultant’s home offices. There would be a second weeklong consultant visit to Kabul for presentation of the work.

5) No Detailed Long-Range Master Plan Needed: Such extensive and intensive planning is not recommended in this case since it would only delay much needed improvements while focusing on a long-term future that will surely be different from the present. We recommend instead that the Concept and Strategic plan is sufficient direction to move confidently ahead with first stage improvements. While these are being completed detailed plans for the next stage may be developed, and so on. Thus overall zoo redevelopment is flexibly staged as funds and opportunities become available.

6) International Zoo Partnerships: It is strongly recommended Kabul Zoo enter into a memorandum of understanding with a suitable international zoo as a strategic partner and advisor. Several candidate zoos can be suggested. Once this partnership is established, a representative of the partner zoo would ideally participate in the planning activities outlined above.

7) Planning Team should contain experienced professional zoo planners and designers as well as architects, landscape architects and project managers.. There also would be a zoo biologist and engineering group (including hydrology), cost estimators and business planners. The lead consultant should be based in Kabul.

8) Client Team should consist of representatives of the Kabul Mayor's office, Kabul Zoo, NEPA and other appropriate agencies. It should nominate a small Working Group for close interaction with the design and advisory team and an Executive Group for reviewing and approving contracts and material presented by the design team.

9) Advisory Panel could be made up of advisors from UNEP, WCS, MoAIL, the US Embassy, and Kabul University. In addition, the international zoo partner, an expert in botanical gardens, a security specialist and a locally-based marketing and fundraising specialist should assist both planning team and client.

10) Donor Opportunities: Official support of his vision plan creates sponsorship and donor opportunities ranging from immediate high visibility programs like environmental enrichment and new Education Centre exhibits through iconic features like the Birds of Prey Theatre, Syrian Bear Habitat and Primate Encounter to sustainable infrastructure projects like "Living Waters" eco-san facilities. Marketing of these opportunities among the international and local donor community may begin as soon as the Vision Plan is approved.

Conclusions

Kabul is bursting with energy. Widespread City tree planting and infrastructure development demonstrates a strong commitment to a peaceful and prosperous future. Kabul Zoo redevelopment is a unique opportunity to expand this commitment to not only embrace a 'green' and family-friendly zoo and national wildlife centre, but also a healthy Kabul River and park system, all complimenting the Mayor's vision of a "City of Light".



APPENDIX

Zoo Strategic Perspective

Why have zoos? While zoos remain immensely popular worldwide, the scientific and ethical reasons to have zoos have evolved greatly since the founding of the Kabul Zoo. Yet the Kabul Zoo's founding vision of becoming a "centre for the conservation of wildlife" is even more important today. In this era of mass extinctions of wild species of plants and animals zoo have several primary missions: **1)** To use their undiminished popularity and unique close encounters with living animals for popular conservation education and most especially for creating an emotional bond for children to wildlife; **2)** For advanced education of students in fields like physiology, ethology, veterinary medicine, botany, art and many other fields; **3)** As a base for scientific research into endangered plants and animals and for testing and training of hardware and techniques for wildlife management; and **4)** For breeding and maintenance of highly endangered 'insurance populations' threatened with extinction in the wild. **5)** As centres for nature-based family recreation.

While zoos have been developed as prestigious collections of exotic and commercially valuable animals and plants since ancient times, this is no longer considered an adequate reason to establish a zoo according to respected international organizations like the World Association of Zoos and Aquariums (WAZA) or its fellow zoological organizations in the US, South America, Europe, India and Australia/Pacific.

International trends in zoo include **1)** Putting the well-being and welfare of the animal's first, **2)** Displaying animals in naturalistic environments simulating their natural habitat, **3)** Basing exhibits on educational messages and conservation and ecological concepts, **4)** Integrating zoology, botany, ecology and other forms of natural history into 'bioparks', **5)** providing strong university and scientific connections, **6)** Developing well-trained and highly motivated staff, **7)** Building international partnerships with other zoos, NGOs and international wildlife conservation accords, and **8)** Developing sustainable business plans and funding mechanisms.

Another relevant international trend is the establishment of zoo/bioparks based upon national or regional bio-climate and geography. For example major bioparks like the Arizona Sonora Desert Museum and the Living Desert Reserve (USA), Al Ain Wildlife Park and Resort (UAE) and the Desert Wildlife Park (Australia) all specialize in presenting beautiful living desert landscapes.

What are common problems and challenges to zoos internationally? **1)** Animal welfare organizations put increasing political pressure on zoos to improve conditions for captive animals Zoos that are already successful in providing the best and most advanced programs in animal care have little to fear from this powerful movement. **2)** Some areas like India and Latin America place time or political limits on zoo directors' tenure, discouraging long-term planning. **3)** The lack of adequate, predictable long-term funding is probably the greatest constraint to developing excellence in zoos. **4)** The triple threat of climate change, energy revolution and financial recession are challenges as well as opportunities all organizations face, while Afghanistan has its own security, economic and capacity challenges.