

River Parks and Ecological Centers: Key elements and Case studies of successful sites

In efforts to better identify successful river parks and ecological centers, we determined that four key categories had to be integrated.

- Diversity of Program
- Environmental Sensitivity
- Unique Design Elements
- Comprehensive Development Process

Within these categories a number of key elements are required in designs that successfully incorporate the natural world into the daily lives of city-dwellers and visitors. They are as follows:

- The adaptive re-use of industrial landscapes and specific buildings.
- The incorporation of the built environment, cultural heritage, and natural and native systems.
- Mixed-use developments that reinforce relationships with commercial and industrial uses providing them with direct access to natural elements, services, and infrastructure.
- Diverse program made up of various intensities (i.e. a mixture of programmed and unprogrammed spaces), available for day and nighttime use, and oriented to all ages.
- Public support generated through annual events, active community participation, and regional governance that involves individuals from a variety of backgrounds.
- Creative Financing that can be achieved through phased development, charging membership fees, allowing individuals to "own" (finance) specific elements, and fundraising at festivals and events.

Case Studies:

Ruhrgebiet, Germany

Similar to the Cardener corridor because this wasteland was considered to be nothing special, this region in Germany has become a magnet for various forms of activity. It took tons of imagination and pride on the part of the people to develop it into the park system it is today. The 45-mile

long, 10-mile wide area was sprinkled with abandoned coal, iron, and steel factories and mines. While the scale of this project was much larger than the area we are studying in Catalunya, it involved cooperation between municipalities and found creative ways to revive the leftover spaces of industrial uses, incorporate them with nature, and celebrate their history.

Some of the projects included in this park system are:

- Water and soil remediation, regrading of river banks, garden shows and community gardens, walking and bicycle trails, playing fields
- New and recycled industrial buildings; new and restored homes
- site-specific art
- scientific studies, demonstration and teaching farm, discovery museum , ranger station, visitor center, event hall, exhibition space, arena
- cafes/commercial spaces, office space

Northside Park, Denver

A 1930's sewage treatment plant was desolate for thirty years until its potential as a river park was realized. Rather than absorb the enormous costs of demolishing the existing structures, many of the foundations were left in tact and incorporated artistically into the park. These low-maintenance structures provide flexible spaces for recreation and nature exploration, serve as historical reminders of the area, and allow for a financially affordable project.

Also incorporated into the park was the reclamation of the river and natural components. They regraded riverbanks and planted the area with natural species to improve the park's environmental health. In addition, the area was zoned light industrial to provide job base on surrounding sites. This is an example of creating a unique, attractive space, that serves the open space needs and employment needs of adjacent communities (not just a pretty space). The park also includes numerous playing fields and urban camping grounds.

Guadalupe River Park in San Jose, California

This park was initiated as a flood control project, but was designed to incorporate wayfinding, access points that attract people, and public amenities that dot the riverside. In addition, the city improved the channel network and natural riverbanks. It has become a green corridor stretching throughout the city, while relating to urban developments along the river. Building development guidelines, orientation and massing of the buildings,

treatment of parking, setback restrictions, and commercial buildings' direct relationship to river's edge are required so that the park benefits from future development. The program also includes a children's discovery museum, a center for performing arts, and a park for festivals.