



Water

Integrated Water Resources Management

Client

U.S. Army Corps of Engineers,
City of Phoenix

Location

Phoenix and Tempe, AZ, USA

"This is the highest honor bestowed by the National League of Cities. Tempe was one of only three gold winners selected from across the nation for the tremendous success of the Rio Salado project, which provides safe and effective flood control, residential and commercial development, recreational opportunities, and restoration of natural habitats...After only four years since filling the lake, it is very gratifying to have already received national recognition from our peers in public service."

Tempe Mayor Neil G. Giuliano

Rio Salado Restoration and Tempe Town Lake

Project Highlights

- Restores 8.6 kilometres of riverbed to a continuous flow stream in Phoenix
- Created the Tempe Town Lake to control flooding and provide a bustling city attraction
- Creates more than 32 hectares of new wetland habitat, waterway trails, and hosts a multitude of nesting and migratory birds

Project Description

The Rio Salado (Salt River) Environmental Restoration Project is one of the best examples of water resources projects incorporating numerous technologies, including flood control, irrigation, and environmental restoration. This project was completed for the Corps of Engineers and City of Phoenix. CH2M HILL led the project with involvement by multiple subcontractors.

Our team is provided overall project management and design and construction services to build the waterway trails and habitat while accommodating the various needs and limitations of neighboring landowners and businesses, including the Phoenix Sky Harbor International Airport and a Superfund site.



This project, completed in late 2004, is a great example of how multiple technologies can be used in a new frontier for water resources. This project included habitat plantings and multiple civil engineering challenges. Some of which include:

- Areas with impermeable liners to allow vegetation establishment on the channel walls with minimal water supplies
- Placement of wells and development of groundwater withdrawal schedules to avoid migration from groundwater contamination plumes
- Development of streams to provide continuous flows in the "streams" and "waterfalls" and minimizing water supply needs
- Integration of recreational paths, gateways, equestrian facilities, staging areas with parking and visitor accommodations

Grading, soil science, irrigation facilities, and road designs were also major portions of this project.

The Rio Salado Project, the most ambitious public-private partnership in Tempe history, received the 2003 James C. Howland Award for Urban Enrichment.

The goal of the overall project was to restore the native wetland and riparian habitats that were historically associated with the Salt River ecosystem. Development of the U.S. Bureau of Reclamation Salt River Project that provides water supplies for users and developed the City of Phoenix and



vicinity brought changes to the river. The river still serves the needs of the people as a flood control device but the environment that defined the river has been destroyed and/or eliminated over the last 100 years. This Project restored a river environment that represents many of the natural systems previously present along the river.

The project includes a functionally operating water supply and distribution system that both sustains and promotes the natural regeneration of plant materials and a maintenance road system that is required to support and maintain these habitats. The design focused on incorporating controlled passive recreational and educational elements and features into the project by adhering to such concerns as recycle/reuse, accessibility, use of local materials, and historical value.