



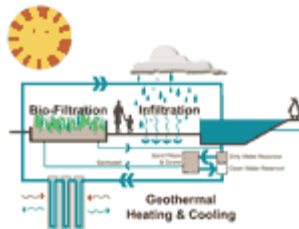
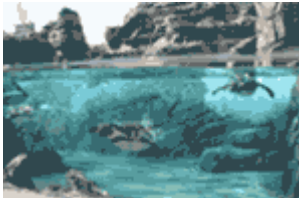
"Penguins of the Humboldt Current"

Woodland Park Zoo - Seattle, Washington USA

Role: Project Leaders / Design Managers

Completed: May 2009

Budget: \$5.2m



Woodland Park Zoo's new Humboldt penguin exhibit opened on the 2nd of May 2009 after two years of work by both the Woodland Park Zoo Team and the Design Team, led by *Studio Hanson/Roberts*. The dream was to convert a 50 year old former sea lion pool that had been re-purposed as an exhibit for 8 Humboldt penguins into a state-of-the-art penguin habitat for an increased number of penguins (up to 60!); immersion of the guests in a coastal desert environment (in Seattle!!); a radical reduction in resource use; and a dramatically reduced cost of the design process. All of these goals were met by using Lean Design®, an industrial manufacturing strategy, to achieve balanced excellence. One of the most unusual tools was the use of "try-storming" and the creation of a full-scale model of the exhibit, built as part of the design process.

The final design replicates a penguin nesting and guano harvesting reserve at Punta San Juan, Peru. Through the creative use of embedded interpretation, live programming and the liberal reliance on strategic marketing and the Zoo's own blog-spot. The stories of penguin social life, environmental threats, scientific and conservation partnerships, and green technology are brought to life with a minimum of signage.

The operational goal is to fill the 32,000 gallon pool once and to eliminate stormwater drainage and sewerage charges through the use of pervious pavement throughout the entire visitor space, the incorporation of rainwater storage and the creation of a closed system use both traditional sand filters as well as constructed wetland cells for pool water filtration. Heating and cooling is regulated through the use of geothermal wells, as well as by taking advantage of natural heat loss and gain through the exposed pool surface. The exhibit consists of three different levels of under- and over-water guest viewing, a service kitchen, holding room and nesting room with 27 burrows. This exhibit is the first phase of Woodland Park Zoos' \$14 million dollar West Entry Redevelopment plan.

References: Bruce Bohmke, Deputy Director
Monica Lake, Project Manager
R. Scott Vance, Interpretive Exhibit Specialist