

ABSTRACT

CREATIVE PROJECT: Integrating Sustainable Rainwater Management:
An Artful Rainwater Design Approach to Zoo Design

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The purpose of this creative project was to apply the Artful Rainwater Design approach to integrate sustainable rainwater management with zoo habitat design. The goal was to capture, clean, and reuse rainwater on-site (providing utility) in a noticeable, artful, and educational manner (providing amenity) in the Plains area of the Indianapolis Zoo. This conceptual redesign demonstrates how the landscape architectural design process can be utilized to help protect the future of zoos by helping them embrace the universal message of the importance of resource conservation.

A qualitative research method, specifically a literature review, was used to complete research about the history of zoos, zoo design methods (including flex-model, immersive, and animal-as-client), rainwater management in zoos, zoo safety, and the Indianapolis Zoo.

Case studies of sustainable practices at Cincinnati Zoo, Woodland Park Zoo, Detroit Zoo, Melbourne Zoo, and Jacksonville Zoo were completed, as were case studies of select Artful Rainwater Design projects including Historic Fourth Ward Park, The Outwash Basin - Stata Center at MIT, and Queens Botanical Garden.

After reviewing the different methods of zoo design and rainwater management, the Plains area was conceptually redesigned with ARD strategies used throughout. The visual character of the new central gathering place/water feature and the elephant habitat and its viewing platform were explored further.

This creative project shows how using an Artful Rainwater Design approach to conceptually redesign the Plains area of the Indianapolis Zoo could benefit the animals living in the zoo, the people visiting the zoo, and the zoo itself through responsible, artful rainwater management.