



Building a Sustainable Future: Tools & Strategies for Environmental Design

What is Sustainable Development?

"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

A 3-Pronged Mitigation Strategy



Case Study: Flood Mitigation in Linden, NJ
This project used a three-part strategy to reduce flooding and restore the ecosystem.



1. Green Infrastructure
(rain gardens)



2. Drainage Recovery
(clearing culverts)



3. Floodplain Restoration
("Blue Acres")

The Digital Toolkit for Sustainable Design



Life Cycle Analysis (LCA)

Assesses the full environmental impact of a product or process, from creation to disposal.



Geographic Information Systems (GIS)

Collects and analyzes geographic data to model and visualize environmental changes and impacts.



Building Information Modeling (BIM)

An intelligent digital model that serves as a central information hub for a project's entire lifecycle.