

# SUSTAINABLE INFRASTRUCTURE THROUGH ECOLOGICAL DESIGN



Organizations like yours leverage ecological systems to naturally combat climate change and operate sustainably. There's a lot to think about when facility design goes beyond bricks and mortar. A climate-adaptive plan includes these four essential actions.

## Manage Climate Vulnerability

Climate analytics help organizations identify the likelihood of climate hazards and the resulting impact to operations. With this knowledge, organizations:

- Prioritize budgets to adapt or mitigate buildings, systems, or functions to the predicted risk
- Plan fiscally for the potential costs of climate change

## Hire Mother Nature

The best plans for sustainable systems work across geography and ecology. They account for natural hazards and resilience features to help protect critical services and functions. Sustainable plans often:

- Use or restore natural wetlands to uptake excess rain and floodwater
- Apply native vegetation to withstand natural hazards and lessen climate impacts
- Design streets to direct water away from structures
- Bury electric distribution wires and communication infrastructure

## Use Data to Increase Project Value

Data aligns projects to local conditions to support regional environmental goals and reduce hazard vulnerability without sacrificing functionality or cost. The infrastructure rating tool Envision™ enables organizations to evaluate project sustainability criteria to design an ideal project from the perspectives of:

- Quality of Life (purpose, well-being, community)
- Leadership (collaboration, management, planning)
- Resource Allocation (materials, energy, water)
- Natural World (site selection, land and water, biodiversity)
- Climate and Risk (emissions, resilience)

## Create a Culture of Sustainability

Building resilience and sustainability often means introducing new technologies. Organizations that set a strategy to achieve sustainability goals will:

- Guide sustainable practices and adopt new ways of working
- Manage operational impacts and protect expected return on investment
- Keep morale high as new technologies are introduced
- Ensure staff skills evolve to support new operations



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