# **Integrated Water Strategies:** THINKING OUTSIDE THE PIPE



The era of taking water for granted is over. Our rising global thermostat and aging water infrastructure make that clear. When it comes to planning and designing buildings, landscapes and communities, water no longer comes last.

The most desirable and resilient communities now rely on "integrated water strategies," ways of handling water that integrate the built world with the natural environment, ecological science with traditional planning and design disciplines, and people with the broader community of life.

# When you see your "site" as part of a watershed and as habitat for all life, amazing things can happen.

To us, your site, campus or district is part of a watershed, and should ultimately function like one. We look beyond your immediate water needs—stormwater management, wastewater treatment, conservation, etc.—to help you devise strategies that not only make the best and most efficient use of water, but also enhance the economic, ecological and social capital of your project.

Integrating Biohabitats' ecological expertise with the talents of leading architects, landscape architects, and planners enables you to understand your "water footprint" and craft appropriate strategies for harvesting, treating and reusing this precious resource. We help you focus resources on increasing project ecological and economic resiliency while reaping additional benefits such as expanded habitat, greenspace or production of reclaimed water for sale or your own use. It's an approach that respects not only the natural water cycle but also the surrounding people, plants and animals that depend upon access to abundant, clean water.

## WATER HARVESTING & REUSE SOURCES

### » Rainwater

- » Greywater
- » Wastewater
- » Cooling system condensate & blowdown
- » Site stormwater
- » Building foundation de-watering

#### **BIOHABITATS' WATER STRATEGIES**

- » Production of harvested water for-, Toilet flushing
  - · Landscape irrigation
  - , Cooling system &
  - central utilities plant make-up
- Beneficial reuse for habitat &
- groundwater recharge
- » Net zero & efficient water plans
- » Natural wastewater treatment systems
  » Low-energy & efficient package treatment system customized design
- » Composting toilets & nutrient recycling/diversion
- » Water feature, pond & lake ecological filtration techniques







Urban stormwater bioretention area

Water Planning for Campus Expansion · UNC-Chapel Hill, Carolina North WATER SUPPLIES & DEMANDS SUMMARY Millions of gallons per year (MGY)



#### **MULTIDISCIPLINARY TEAM AT YOUR FINGERTIPS**

- » Water resources engineers
- » Ecological engineers
- » Stormwater specialists
- » Water reuse specialists
- » Water treatment operators
- » Soil scientists
- **PROJECT TYPES & SERVICES**
- » Water master planning/audits
- » Water conservation & reuse feasibility
- » Decentralized wastewater treatment & reuse
- » District scale water design
- » Living Building Challenge™ & net zero water analysis
- » Rainwater harvesting & reuse
- » Natural/living wastewater systems
- » Greywater treatment & reuse
- » Sewer mining

- » Ecologists
- » Hydrogeologists
- » Conservation biologists
- » Landscape architects
- » GIS technicians
- » Stormwater green infrastructure & low impact design
- » Watershed management planning
- » Stream, wetland, & shoreline restoration
- » Economic analyses & rate studies
- » Monitoring programs
- » Engineering design, plans, & specifications
- » Sustainable water guidelines & metrics
- » Regulatory permitting
- » Hydrologic & hydraulic modeling



Restore the Earth & Inspire Ecological Stewardship