LOW IMPACT DESIGN FOR THE INDIAN RIVER LAGOON

August 31, 2020

The Indian River Lagoon (IRL) is one of the most valuable wildlife habitats in Florida. It is an Estuary of National Significance and has been internationally featured as the most diverse estuary in North America. The Lagoon is being badly damaged by human caused pollution, which produces algae blooms that devastate its marine life. It is federally listed as an impaired waterbody. Local governments, acting in compliance with the Florida Department of Environmental Protection (FDEP) Indian River Lagoon Basin Management Action Plans (BMAPs), are attempting to repair the results of past development mistakes and reduce the pollutant loads in the Lagoon. However, the future of the IRL is in peril. Outdated land use and stormwater regulations at state and local levels are enabling development to continue as before, making the same mistakes that got us where we are today. In too many cases, new development and redevelopment will add to the already excessive inflow of pollution to our Lagoon.

Stormwater management remains a primary problem. Current stormwater management systems are, at best, only partially effective in reducing pollutants in runoff and groundwater. Stormwater must be controlled if we are to ensure the future of our Indian River Lagoon. Low Impact Design provides that control.

Low Impact Design (LID) is a globally proven concept of site design and development that minimizes impervious surfaces and retains stormwater onsite to recharge the aquifer and reduce discharges to the IRL. It treats rain water as an asset rather than a liability, prevents Lagoon habitat destruction and reduces flooding. It is a significant change from the old ways of development, but it can be less expensive, reducing development costs overall. LID reduces the need for costly stormwater infrastructure and land acquisition to build large retention ponds.

LID is well documented with detailed engineering information. It is endorsed by US EPA and FDEP. Several Florida communities have adopted LID and have published detailed Best Management Practice (BMP) manuals. However, uncertainty with our outdated State regulations and permitting rules have hampered widespread enactment even though many experts believe that LID will enhance our focus on resiliency and is essential to Florida’s future.

We strongly recommend that local leaders act quickly to approve ordinances that will establish Low Impact Design as the new standard of development in the drainage basin of the Indian River Lagoon. The current pace of growth in the watershed demands that we act now for our Lagoon’s future.

Sincerely,

Leesa Souto, Ph.D.
Executive Director