



RHUMB LINES

Straight Lines to Navigate By



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Navy's Low-Impact Development Policy

"The Department of the Navy Low-Impact Development Policy represents a commitment to preserving and protecting the environment where we work and live. The policy advocates a cost-effective solution that will help minimize the environmental footprint of our installations and facilities."

-- The Honorable B.J. Penn, Assistant Secretary of the Navy, Installations and Environment

A steady stream of base construction projects to ensure Fleet readiness, improve quality of life for Sailors and their families and accommodate the Marine Corps' growing force requires careful attention to environmental impact. The DON's Low-Impact Development policy (LID) is another example of the Navy's environmental stewardship.

The problem – reduced overall water quality from storm water runoff

- Initial EPA efforts to track pollutant point sources and improve water quality focused on reducing pollutants in industrial and domestic wastewater. Studies indicate that EPA regulations have decreased the amount of pollutants in wastewater discharges from point sources, but the nation's waters are still polluted. Storm water runoff is the major non-point source of pollutants still entering the nation's watersheds.
- The EPA promulgated Phase I storm water regulations (1990) and Phase II storm water regulations (1999) to address storm water runoff.
- Recent efforts by regulators to lessen the impact of polluted water runoff include an increased emphasis on storm water compliance and enforcement actions, watershed-based construction permits, as well as guidance and training in use of smart growth techniques such as LID.

The solution – minimizing the environmental impact of construction projects at all installations

The DON LID policy sets the goal of no net increase of storm water volume, sediment and nutrient loading from major renovation or construction projects, and implements the most cost-effective storm water treatment techniques.

- LID is an initiative for all Navy and Marine Corps installations. Naval Facilities Engineering Command is tasked to assist DON installations in meeting the policy requirements.
- LID requires construction projects to imitate a site's predevelopment hydrology with design techniques that infiltrate, filter, store, evaporate, or retain runoff close to its source.
- Instead of conveying and treating storm water in large, costly end-of-pipe facilities located at the bottom of drainage areas, LID addresses storm water through small, cost-effective landscape features located at the site.
- Landscape designs include structural elements such as planted swales and bio-retention areas to capture rainwater where it can be absorbed or evaporated on site, rain barrels which store water and release it slowly, and permeable pavers which allow water to pass through paved areas into the ground.

Key Messages	Facts & Figures
<ul style="list-style-type: none"> • Implementing LID is an important step in restoring the health of our nation's bodies of water. • LID will reduce long-term costs associated with military renovation and construction. • LID is one of several sustainable design and operations techniques leading to Leadership in Energy and Environmental Design (LEED) certifications. • LID mitigates adverse effects on water quality from construction projects by cost-effectively reducing the volume and pollutant concentration in storm water before reaching larger bodies of water. 	<ul style="list-style-type: none"> • New construction results in loss of natural vegetation cover and increased storm runoff. • LID complies with DOD policies, Executive Orders, and the EPA's Clean Water Act. • The DON policy requires incorporating LID design changes where possible in FYs 2008-2010, and to program and budget for LID on projects starting in FY 2011. • LID applies to renovations exceeding \$5 million, and new construction projects exceeding \$750,000. • Visit the EPA and DON sites for more information.