

2014 PEP ENVIRONMENTAL STEWARDSHIP AWARDS

On April 15th, 2014, PEP presented the 10th Annual PEP Environmental Stewardship Awards to 4 member companies and a Community Partner during its Annual Membership Meeting at 5 Rivers Delta Center.

PEP **Member Awards** are presented to member companies that have made a significant and positive contribution to the Gulf Coast region's triple bottom line, economically, environmentally and socially.

PEP **Community Partner Awards** are given to individuals or organizations that dedicate their time and resources to improve the sustainability and resiliency of Coastal Alabama.



2014 MEMBER AWARD RECIPIENTS

Dunn Building Company

New LEED Standard Company Office Building

Dunn Building Company built their new Birmingham office building to reflect their corporate commitment to environmental best practices. The new 6,600 SF building was designed to LEED certification and incorporates many sustainable features, including showcasing pre-engineered steel framing, storm water collection bioswales, low-flow fixtures that reduce water usage by 20%, low VOC paints, motion sensor light switches, along with efficient ventilation and heating and cooling systems that minimize energy usage. The building was also sited to maintain a row of mature trees along Airport Highway. The project included a storm water management system to eliminate all storm water runoff. To date, this system has contributed zero runoff to the county storm system. The pervious asphalt paving system is unique to the area and will be used to demonstrate a creative storm water management system across the region. Dunn submitted for LEED Silver certification with USGBC.

Goodwyn Mills & Cawood

Green Remediation Plan for Brownfield Site

Contaminated fill-material discovered during geotechnical surveying of the 22 acre-brownfield site for the planned Maritime Training Center (MTC) put development of the project in jeopardy. Instead of the traditional and costly excavation and disposal of all material, GMC developed a green remediation plan to revitalize the site for sustainable reuse that reduced costs (only 20% of excavation costs) and ensured construction could proceed as planned.

ADEM approved GMC's three-part remediation plan, which included: phytoremediation (the utilization of plants to cleanup environmental contaminants) with a Bald Cypress forest and fern plots, the first approach of its kind in Alabama; supplement traditional management of a capped parking lot and building structure; and leaving eight acres of on-site wetland undisturbed.

The MTC environmental remedy hinges on utilization of innovative technology. Phytoremediation is slower than more conventional methods, but resulted in unprecedented cost reductions and environmental benefits. The 150+ Bald Cypress trees contribute greatly to the site's aesthetic appeal, minimize sediment runoff during storms, reduce heat islands and sequester carbon, benefiting the air quality. Each tree functions as a mini well point, consuming and cleaning surrounding groundwater, contributing to a more effective broad band of groundwater control.

The plan fulfilled the objectives of the cleanup, eliminated the potential for human exposure to hazardous substances and reduced costs through its self-sustaining approach.

Hargrove Engineers + Constructors

Improve waste water reporting methods

Hargrove Engineers + Constructors was engaged by contract engineers working with the City of Enterprise on Alabama's publicly-owned treatment works to study low-level mercury in the treated wastewater discharge. After extensive analysis, it was determined that concentrations below a certain low level cannot be measured accurately by a lab because of the nature of complex water discharges vs. testing in pure, distilled water. By defining a site-specific minimum level of mercury and showing the inability of the analytical method (testing wastewater samples) to accurately measure mercury levels under this limit, Hargrove demonstrated that any reading under the site minimum should be reported as zero per ADEM/USEPA regulations. Hargrove was able to apply ADEM/USEPA's rule on reporting findings less than the minimum level as zero so that the municipality could avoid unnecessary permit violations. By applying this rule, which isn't typically used in these circumstances, Enterprise (and possibly all of industry) will no longer be reporting numbers that are scientifically inaccurate. This "false reporting" was causing Enterprise to spend major capital and pay unnecessary fines.

Rigorous studies of this nature help the municipality or industrial plant avoid false alarms and focus on real environmental concerns. As an added environmental benefit, this kind of study is able to show additional metal discharges and allows companies to put their attention on pollutants they may not otherwise see in traditional reporting.

Thompson Engineering

Innovative Environmental Restoration/Stormwater Minimization

In 2013, Thompson Engineering completed the construction of a first-of-its-kind project in Alabama designed to manage storm water, solve erosion problems and restore an ephemeral stream in Joe's Branch, which flows into D'Olive Bay and eventually Mobile Bay. Joe's Branch had been identified by the Alabama Department of Environmental Management (ADEM) as impaired due to habitat impacts caused by severe erosion and sedimentation. Besides the habitat and water quality impacts, the erosion was threatening to impact motorists on adjacent Highway 31 and residential structures of nearby Westminster Village. Working for the Mobile Bay National Estuary Program, Thompson Engineering led the design and construction of a Step Pool Storm Conveyance (SPSC) system, an environmentally progressive approach to managing storm water runoff in urban areas. The SPSC system is an aesthetically-pleasing technique that retains and filters storm water during lower flow events and, via a network of riffles and pools, stabilizes the eroded channel and dissipates energy during higher flow events. Water quality monitoring has demonstrated that a significantly lowered sediment load is being transported downstream. The SPSC system is a demonstration project that provides local officials and developers with a model to emulate in the future.

PEP extends special recognition to the Mobile Bay National Estuary Program for its leadership in spearheading an intergovernmental taskforce to find a solution to Joe's Branch in a collaborative effort across political boundaries.

2014 PEP COMMUNITY PARTNER AWARD

Gulf Coast Chapter of the U.S. Green Building Council

The PEP Board of Directors is pleased to name the Gulf Coast Chapter of the U.S. Green Building Council as its 2014 Community Partner. The local chapter is a tireless advocate for best practices in environmentally sound building through education of its members and legislative advocacy.

During the 2013 Alabama Legislative Session, the Gulf Coast Chapter waged a successful education campaign to prevent passage of anti-energy efficiency/anti-LEED legislation. During the current Legislative Session, the Chapter has been leading the effort to insure that legislators understand the benefits of energy efficiency; the benefits of the LEED building rating system; the importance of low carbon and low (to no) volatile organic chemicals emitting materials such as Alabama wood; and to show that these procedures, materials and building systems are a great benefit to health and environment.

The Chapter conducts monthly environmental programs for members and guests featuring various materials, innovations and projects of practical use for energy savings and conservation, energy production, material reuse/recycling, indoor air quality, insulation, reflection, landscaping, roofing, new and existing building procedures, and much more.

The education programs and the LEED rating system have promoted and encouraged many technological advancements in energy efficiency, use of recycled content, use of regional and local materials, improved building materials and HVAC operations in government, private, commercial and residential projects. Projects also include schools, Habitat for Humanity homes, and more with either new or existing buildings.