**A Local Incentive Program for Recognition of LID in the Southeast Coastal Region of North Carolina**

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Outline
- Background and Organization
- Application Process
- Evaluation Criteria and Project Features
- Judges and Evaluation
- Banquet and Awards
- Successes and Opportunities

The Lower Cape Fear Stewardship Development Awards Program

Developed to recognize development projects that are exemplary in their attempts to protect natural resources through stewardship and innovation in project design.

HISTORY
Modeled after a statewide program in South Carolina –
http://www.dnr.sc.gov/water/envaff/river/natrestewardship.htm

cooperators
- Brunswick County
- Brunswick Soil & Water Conservation District
- Cape Fear Resource Conservation & Development, Inc.
- City of Wilmington
- New Hanover County
- New Hanover Soil & Water Conservation District
- Pender County
- Pender Soil & Water Conservation District
- UNC at Wilmington Masters of Public Administration Program
- Wilmington-Cape Fear Home Builders Association
- Wilmington Regional Association of REALTORS

purpose
award developers that go beyond compliance in efforts to protect water quality, preserve wetlands and open space, use green building techniques, and educate the public
basic requirements
- Must be located in New Hanover, Brunswick, or Pender Counties.
- Must be in compliance with or exceed all applicable local, state, and federal regulations.
- Must allow visits to site by the Selection Committee and provide additional information as requested.
- Subject to periodic evaluation by the Selection Committee.

selection criteria
The selection panel will evaluate how well applicants meet the specific criteria established in several principle areas:
- Site Inventory & Development Plan
- Water Quality Protection
- Green Building
- Wildlife Habitat Protection
- Scenic View Protection/Beautification
- Historical/Archaeological/Cultural Protection
- Project Management Plan
- Community Outreach/Education
- Re-use/Revitalization of Existing Sites.

criteria – inventory site features
- Site Inventory
- Soil classes
- Wetland determination/delineation
- Floodplains, drainage patterns
- Ground water
- Wildlife, habitat, native vegetation and critical trees
- Cultural and historical resources
- Public infrastructure
- Issues of concern on adjacent properties

Criteria – site plan
Project Layout
- Layout consistent with natural features
- Minimize native vegetation removal
- Maintain natural drainage
- Limit compaction of soils
- Preserve wildlife habitat
- Connectivity and multi-modal transportation
- Minimize impervious surface
- Minimize cut and fill
- Mitigate environmental problems
criteria – water quality

Construction Impacts / Erosion Control and Sediment Reduction

- Minimize soil and vegetation disturbance
- Limit grading to essential site improvements
- Preserve site’s existing trees and vegetation
- Protect / enhance wetlands and vegetated buffer
- Minimize filling, cutting, and soil compaction

Conventional Versus Conservation Development

Conventional site design

Conventional (or regular) development preserves more natural open space and common grounds. This is the same site with the same number of homes.

Clustering is particularly appropriate for projects that wish to protect natural features while accommodating maximum development density.
criteria – water quality

Stormwater Management – Streets and Parking
- street width
- “doughnut” cul-de-sacs
- shared driveways with grassy strip
- pervious paving materials
- sidewalks on one side of street
- multiple story design
- parking under buildings
- Avoid use of curb and gutter

Stromwater Management (continued)
- on-site infiltration / reuse of runoff
- Reserve Type A & B soils
- Promote diffuse flow of runoff
- Direct flow from downspouts to vegetated areas
- Keep and restore existing storm water channels and streams
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criteria – water quality

Floodplain, wetland, and riparian preservation and/or restoration
- Preserve existing topography and natural features
- Maintain or enhance riparian buffers
- Utilize natural floodplain
- Maintain or enhance wetlands
- Protect wetlands
- Record conservation easements

criteria – green building

Construction Materials and Site
- Use care with construction materials
- Recycle materials on job site
- Protect trees and other features
- Select building materials from "sustainable" sources
- Install systems to use rainwater for irrigation
- Emphasize native plant species to minimize irrigation

Energy Efficiency
- Use high efficiency heating and air conditioning
- Use highest "R" rated insulation packages
- Design for passive solar / natural shading
- Employ active solar energy capture

LEED Certification

building green

criteria - habitat

Protect habitat identified in the Site Inventory
Increase vegetated buffers around aquatic features
Enhance with vegetation conducive to wildlife
Integrate habitat with greenway/wildlife corridors
Design storm water structures to benefit wildlife
Maintain the maximum contiguous woodland
Create a guide for native trees
criteria – view protection

- Integrate the development with the natural landscape
- Design the lots consistent with local natural habitats
- Maximize the use of the native vegetation
- Eradicate invasive exotic plant species
- Protect landscape views
- Create communal view and/or access to water
- Create vegetative buffers that enhance view
- Minimize visual impact of structures and pavement
- Preserve views and privacy of others
- Choose materials and finishes to reflect the landscapes
- Create neighborhood scale recreation facilities

criteria – cultural

- Protect resources identified on Inventory
- Include mounds, wells, and foundations in open space
- Use appropriate architecture
- Research resources located on the Inventory

criteria - project

- Formally record conservation easements
- Incorporate a management plan for preserved, created or restored habitats into the by-laws of homeowners association.
- Provide buffers between areas dominated by human activities and wildlife areas.
- Include in the by-laws controls for pets to protect wildlife and water quality.

criteria - project

- Inform purchasers / residents of project.
- Develop vegetation management plan.
- Provide interpretive facilities
- Provide financial assurance.
Criteria - outreach

Pre-construction - Developer Responsibilities
- Create stewardship mission statement
- Involve neighbors in project design
- Explain benefits of low impact development
- Create cooperative opportunities to resolve community issues

Criteria Outreach

Construction - Developer Responsibilities
- Post mission statement
- Publicize environmental benefits
- Incorporate environmental benefits in marketing literature
- Actively participate with builders in siting and landscaping
- Install pet waste stations
- Educational signage about the natural and cultural features

Criteria - outreach

Active sales period - Developer / Marketing Agent Responsibilities
- Distribute environmental information to potential buyers and builders
- Publicize financial and community benefits of low impact development
- Emphasize features in "Parade of Homes", community meetings, and special events.
- Provide public access to natural, historical, archaeological, and cultural features

Criteria - site reuse

Conduct an environmental assessment to identify:
- "Outstanding" trees
- Threat to ground water
- Existing storm water management facilities
- Role of the site in supporting neighborhoods

In the site design, evaluate:
- Service roads and drainage, with existing communities and developments
- Save or re-direct existing functional plants
- Determine if the architectural details are compatible with the built environment in which the development is built

Selection panel

- Independent Selection Panel
- 5-7 panelists
- Comprised of professionals in the fields of engineering, natural resources sciences, planning, architecture, landscaping, and others
- Review applications to determine projects worthy of Outstanding Recognition and Significant Achievement awards
Process for Selection

- Panel visits applicants' sites
- Judging Panel completes evaluation
- Evaluation submitted to Planning Committee
- Planning Committee determines Awards based on panel evaluations

Outstanding Recognition is the highest level of distinction available in the Stewardship Development Program.

Significant Achievement is the next level of award for a project that may not be eligible for Outstanding Recognition.

Guidance for Evaluation

- Which criteria are met
- Degree to which the criteria are met
- Genuine effort to go beyond that which is required
- Stewardship opportunities missed
- Meets the intent of stewardship of natural resources
- Project is complete
- Should project be awarded the "Outstanding Recognition" award? Why or why not
- Worthy of "Significant Achievement" level of recognition for achieving certain objectives
- What could the applicant do?

Guidance for Evaluation

- Not a test
- Not a competition

Primary objective: Find projects that demonstrate preferred development approaches to recognize as examples.
Guidance for Evaluation

- Secondary objective: Provide feedback and recommendations to improve projects.

Stewardship Development honorees receive recognition and promotion of their efforts through:
- Acceptance into program
- Exposure through releases and related literature
- Recognition at an annual awards banquet
- Display of Award signage on project site
- Right to use of logo in promotional materials

Successes

- Increased applicants
- Return applicants
- Media Attention
- Stand alone banquet
- Sponsors
- Banquet Attendance

Banquet Success

- 190 registered
- 15 elected officials
- 7 sponsors

Banquet Sponsors

- Gold Sponsors
- Silver Sponsors
- Bronze Sponsors
  - B&O: Design Studio
  - Freeman Landscape

Opportunities

- Take Program to the Next Level
- Improve Criteria and Guidance
- Enhance Publicity
- Diversify Applicant Pool
- Expand Applicant Pool Geographically
- Duplicate or Expand Program
Thank you

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