Definition:

Conservation subdivision design goes beyond the simple goal of clustering buildings together and preserving a portion of the parcel as open space. Conservation subdivision design is:

- Based on the natural and cultural resource attributes of the property
- Reflects the broader environmental and social goals of the community
- Allows for greater flexibility in design to provide for greater natural resource protection
Conservation Subdivision Design

- Same number of housing units
- 10-50% less impervious surface
- Reduces amount of infrastructure
- Flexibility to tailor development to the land and preserve natural & cultural features
Review Process

- Detailed Site Inventory of Parcel Features and Conceptual Plan submitted PRIOR to Formal Application

- Approach to design is responsive to site characteristics
Conservation Subdivision Design

Step 1: Identify Primary Conservation Areas

Source: Arendt et al: Open Space Design Guidebook for the Albemarle-Pamlico Estuarine Region, NC Assoc of County Commissioners, 1996.
Conservation Subdivision Design

- Step 2: Identify Secondary Conservation Areas
Conservation Subdivision Design

Step 3: Identify Potential Areas for Development
Conservation Subdivision Design

Step 4: Locate Potential House Sites
Conservation Subdivision Design

Step 5: Lot Lines, Roads and Trails

140 acre parcel
97 acres protected
42 house lots

Improve Plan / Design Review Process

“Before Review” – With Conventional Standards

“After Review” – With Better Design Standards

More impervious surface (long driveways, wide road, more grass), direct stormwater drainage, and less open space

Less impervious surface (shorter driveways, narrower road, less grass), onsite stormwater treatment, and more open space

Percentage Change in Key Site Characteristics

Study by the Center for Watershed Protection, “The Benefits of Better Site Design in Residential Development.”
Ezra Green’s Farm
Dover, NH

- 46 homes grouped on 40% of property (60% conserved)
- Protects wetlands and adjacent uplands
Ezra Green’s Farm, Dover
- 115 acres, 85 acres as open space (74%)
- 42 house lots (1/3+ to just under 1 acre)
- Community Leachfield and Community Well
Great Pines, New London, New Hampshire
40 acre parcel, 12 acres conserved (30%)
14 lots on 28 acres (1.4-2.5 acres/each)
Two Conservation Developments
Hanover, NH
Caldwell Farm
Newbury, MA

125 acre site, 100 acres conserved (80%)

*open space* includes fields, forest, freshwater, and saltwater wetlands adjacent to the Parker River National Wildlife Refuge and an Area of Critical Environmental Concern (ACEC).

66 units (includes 4 bonus units)
Number of Dwelling Units

- Formula Approach Preferred

- Yield Plan Approach Option
  - Can be required for certain types of situations

- Additional Units may be Awarded for desired characteristics, e.g.:
  - Greater Area Conserved
  - Public Access
  - Third-party held Conservation Easement
Designated Open Space

- 50% of Parcel (minimum)
- Specify priorities for conservation, layout, and any uses allowed
- Require appropriate management and stewardship
Design Standards

- Reduced dimensional requirements to increase flexibility to “fit” development to landscape
- Conditional Use Permit may be issued by the Planning Board to allow variation from Dimensional and Design Standards
- Additional design standards for developed area and open space added to Subdivision Regulations
COMPARE

About 13 acres contiguous “backland” as open space

About 25 acres contiguous “backland” as open space
Site Development and Design Standards Are Important – Consider Applying to All Development

Examples: Clearing, Grading, Retention of Mature Vegetation, Architectural Design
Using Conservation Subdivision Approach with Natural Resource Inventory
Using Conservation Subdivision Approach with Natural Resource Inventory
Getting the Most from Conservation
Subdivision Design Approach

- Make Process Simple – Focus on Goal
- Flexibility but with Standards for Design
- Coordinate with Local/Regional Open Space or Conservation Plan
Resources:

- Randall Arendt
  - www.greenerprospects.com
  - Conservation Design for Subdivisions, 1996

Design a 40 unit development on 90 acres based on the natural resource information for the property using a Conservation Subdivision Design approach.

Steps:
- Identify areas to target for conservation & why
- Identify home sites
- Consider well, septic and stormwater management options
- Identify road placement
- Summarize factors considered in your design
32 acre parcel with sixteen Typical 2-acre lots
No Open Space
32 acre parcel with sixteen 0.68-acre lots
21+ acres open space
32 acre parcel with sixteen 0.25-acre lots
28 acres open space (except for well & septic fields)
32 acre parcel with no State minimum lot size
29.6 acres mostly undisturbed in example (0.15 acre lots)