CONSERVATION DESIGN
VERSUS
TYPICAL CLUSTER REGULATIONS

by Staff of the Natural Lands Trust, Media, Pennsylvania

One of the most frequently asked questions about the *Growing Greener* model ordinances is "How do these codes differ from traditional "cluster" regulations?" The conservation design standards advocated under the *Growing Greener* program build upon cluster regulations, performance zoning and other environmental protection techniques. There are, however, several shortcomings of typical cluster regulations that may be helpful to understand as your community considers revised land use codes.

A. DIFFERENCES IN ZONING APPROACHES

1. Conditional Use *versus* "By-Right". **Many existing "cluster" provisions are almost self-defeating in that they subject these creative designs to a Conditional Use process, whereas standard, checkerboard designs may proceed unimpeded, "by right". As most developers prefer simple, clear, as-of-right approvals, instead of the extra time, uncertainty and additional hearings attached to the Conditional Use process, the "conventional" alternative is usually selected. The *Growing Greener: Conservation by Design* program promotes a new form of cluster development called "conservation design." The program encourages municipalities to allow conservation design *by-right*, although it should also be required to conform with a detailed list of design standards pertaining to the quantity, quality, and configuration of open space, to ensure a design that will benefit the community as a whole.**

2. **Minimum Tract Size.** The typical minimum tract size of 25 acres for flexible cluster or conservation designs effectively mandates standard, unimaginative layouts for all lands under those thresholds. This kind of restriction could prevent municipalities from achieving interconnected open space networks, where continuity could be lost if some of the necessary linkages involve parcels smaller than 25 acres. In a two-acre zone, with a four-acre threshold, this lower threshold could preserve two acres of greenway connection (or perhaps save enough land to accommodate a local ball field), while still providing two one-acre lots.

3. **Calculating Open Space.** Many earlier cluster codes set the open space requirement fairly low, such as 25 or 35 percent of the *gross* tract area (meaning that percentage of the total parcel acreage.) Conservation design sets minimum open space requirements as a percentage of the *net* buildable land area that is <u>not</u> constrained by wetlands, floodplain, or steep slopes. This ensures that a good part of the total open space will indeed be usable by more than ducks or mountain goats. Under

Growing Greener, 50% to 70% of the net usable tract area, *plus all of the land constrained by wetlands, floodplain, or steep slopes,* must be conserved.

4. **Open Space Ownership and Maintenance.** Typical cluster regulations fail to specifically include non-common open space as one of the available options for ownership. Many ordinances suffer this deficiency, being outdated and assuming that the subdivision open space will be commonly owned, or owned by a land trust or some public entity. Examples of the non-common ownership alternative include the working orchard at *The Ponds at Woodward* subdivision in Kennett Township, Chester County, PA the wholesale nursery operation in *Indian Walk* in Buckingham Township, Bucks County, the horse pastures and equestrian facility in *Summerfield* in Elverson, Chester County and the conserved fields at *Farmview* which are owned by a municipal land trust (the Lower Makefield Township Farmland Preservation Corporation, Bucks County.) All these examples are illustrated and described in the *Growing Greener* workbook.

5. **Inadequate Lot Size Reduction Potential.** Many cluster regulations provide for only a marginal reduction in lot size, and are therefore incapable of protecting a significant percentage of the lands as open space. By contrast, a basic tenet of conservation planning under *Growing Greener* is that lot size minima are almost irrelevant, as overall density and minimum open space are both established in another way. In fact, the smaller the lot, the more open space there is. In Lower Merion Township, Montgomery County, PA where similar ordinances have been in effect for ten years, the absence of lot size minima has not led to abuses in that direction. In fact, developers have routinely produced the largest lot they can under that community's ordinance, while still meeting the basic 50% open space minimum standard.

6. **A New Look at Density Incentives.** Most of the older "cluster" ordinances on the books today include density bonuses as a "carrot" to entice developers to select this option. However, our experience is that density incentives (when unaccompanied by density *dis*incentives) typically need to be rather huge to encourage developers to do anything different from the standard cookie-cutter layout in situations where they can easily continue to build these land-consumptive layouts at full density, by-right. However, large incentives often set up a certain community dynamic inadvertently, wherein local residents (often abutting landowners) vent their displeasure at having to put up with a significantly higher number of people living nearby, not to mention more schoolchildren to educate and more traffic to congest the roadways. Rather than face such opposition, most developers

usually opt for the simple and relatively hassle-free route, with standard full density in standard lots and no open space.

The *Growing Greener: Conservation by Design* program recommends *reversing this dynamic*, so that developers must "earn" their basic full standard density through conservation design with significant open space. Under this approach, there is no density bonus for the standard conservation subdivision with 50 percent of the unconstrained land designated as open space. That kind of development becomes the basic standard, and is the only way for developers to achieve full density. Those who wish to continue with cookie-cutter designs covering the entire development tract with houselots and streets may do so, but only at a lower overall density, as described below.

7. **The Modern Idea of "Density *Dis*incentives".** Most cluster ordinances make the grave error of continuing to allow conventional "land-hog" sprawl development as a full-density option, granted "by right". Under *Growing Greener*, communities have for the first time a truly effective method of actively discouraging such land-consumptive development patterns, which often also fail to create any sense of neighborhood or community. *Growing Greener* actively discourages large-lot subdivisions by reducing the overall density (or "lot yield") for applicants who elect not to participate in the conservation design approach. This is perfectly legal. In fact, some townships have gone farther: they have eliminated the large-lot option altogether, not allowing it to be built at any density, as described immediately below.

8. **Requiring Conservation Design in Certain Situations.** Some municipalities *require* conservation design (instead of conventional plats) in situations where parcels are proposed for development along the Township's pre-determined *Map of Potential Conservation Lands*, to ensure that possible future greenway connection opportunities are not lost. Other areas where conservation design could be required are on properties abutting public parks, forest preserves, game lands, conservancy lands, working farms, etc. This approach would ensure that the interconnected network of open space would become a reality, and not simply be another good idea that is not implemented.

9. **Lot Averaging.** This technique allows smaller lots to the extent they are counter-balanced by an equal number of correspondingly larger lots. Based upon our experience with "lot averaging" in other townships, this technique is rather weak and does not achieve particularly noteworthy conservation results. The multiple options available through *Growing Greener* give all parties (the Township, the landowner, the developer, and future residents) a better outcome.

10. **Multiple Housing Type Option.** We believe that the housing variety available through Option 5 (Hamlets and Villages) municipalities with an excellent way of meeting the typical Comprehensive Plan objectives for providing a range of housing types. In fact, when it adopted the first *Growing Greener* ordinance in Pennsylvania in the mid 1990s, Wallace Township deleted both its former lot-averaging and PRD sections.

    Under *Growing Greener*, Option 5 contains detailed design requirements to ensure that the resulting development will resemble traditional 19th century villages, including standards for single-family village homes, semi-detached (two-family) homes, and multi-family residences. The traditional neighborhood standards reflect the layout and appearance of multi-family housing that one sees in Wyomissing, an early 20th century planned community adjacent to Reading PA. Wyomissing's streetscapes are so wonderful because the multi-family buildings front onto and are integral parts of a traditional streetscape. All parking is either provided for in parallel curbside spaces or to the rear, in garages built on the back lot line. These garages effectively screen the rear service lanes from the individual back yards. Another point worth noting is that single-family, two-family, and multi-family homes are sometimes located together on the same block in a way that one sees only infrequently these days. Whether the housing types are integrated or segregated with respect to one another, the principal point is that, except for the parallel curb-side spaces, parking occurs only to the rear, out of sight, and in locations that buffer and give privacy to back yards. This is the same arrangement used in several recent, highly successful neo-traditional communities, including "The Kentlands" and "Wyndcrest," both in Montgomery County, Maryland, and in "Celebration," Florida.

B. DIFFERENCES IN SUBDIVISION REGULATIONS

Good conservation subdivision design requires flexible zoning standards, as outlined above, and detailed standards in the Subdivision and Land Development Ordinance with respect to how and where the open space is designed.

1. **Existing Resources/Site Analysis Map.** While many older cluster regulations include requirements for an "existing conditions" map, they typically do not go far enough in what they require to be shown. Typically, wetlands, floodplain and steep slopes 25 percent and greater are required, and sometimes woodlands and large trees standing alone are added. The difference in the *Growing Greener* approach is that the existing resources are seen as being much more inclusive, and the map is prepared and submitted with a *Sketch Plan*

(see B.3 below), instead of waiting until preliminary plan stage. In addition to the previously mentioned elements, the map includes natural, cultural, historic, aesthetic and scenic features such as hedgerows, large trees within woodlands, stone walls, building ruins, existing trails, knolls, moderately steep slopes 15-24 percent, boulders, rock outcrops, meadows, scenic views into and from the site and any other features that contribute to the landscape character of the property. This is the most important document in the subdivision design process, as it provides the factual foundation upon which all design decisions are based.

2. **On-Site Visit.** The standard subdivision review process does not include a site visit by municipal officials or, at the most, makes it optional. To ensure that elected officials and planning commission members understand the existing resources and landscape character on a development parcel, a site visit, with the *Existing Resources/Site Analysis Map* in hand, becomes a necessity for conservation design and is written into the codes. Without the benefit of experiencing the property in a three-dimensional manner (as opposed to reading a two-dimensional plan in a meeting room), it is extremely difficult to judge the appropriateness of proposed layouts.

3. **Sketch Plan.** The *Sketch Plan* is perhaps the second most important document in the entire subdivision process. This is a voluntary, conceptual plan on which areas of proposed development and areas of proposed conservation are outlined. The *Sketch Plan* should be prepared as an overlay sheet to be lain on top of the *Existing Resources/Site Analysis Map*, and ideally the proposed development "footprint" on the *Sketch Plan* should dovetail with the resources documented on the *Existing Resources/Site Analysis Map*.

   Unfortunately, many typical cluster regulations do not address the issue of S*ketch Plans* or do not provide enough criteria for adequate Township review. They are critical, however, because they enable the larger issues to be resolved in broad, outline form prior to the applicant spending large sums engineering their "Preliminary Plans." Even though the MPC does not specifically authorize municipalities to require such a "third step" (in addition to the preliminary and final plans), most developers recognize that *Sketch Plans* are time well-spent.

4. **Four-Step Design Approach.** Typical cluster development regulations do not spell out any particular design approach. Thus, engineers using cluster regulations will tend to follow their past practice of laying out streets and houselots first and, as a result, the open space is relegated to the unbuildable and "leftover" land. Conservation subdivision design follows a Four-Step approach, set forth in the Subdivision ordinance, that requires

that conservation areas are determined *first*. If this is done, and if the ordinance requires that a significant proportion of the unconstrained land be designated as open space, it is nearly impossible to produce an inferior or simply conventional plan. In fact, to the extent that the property contains elements of the area-wide network of conservation lands, the plan is likely to be at least fairly good.

After locating the open space areas, the logical second step is to select house locations, with homes positioned to take maximum advantage of the open space in neighborhood squares, commons, greens, playing fields, greenways, farmland, or forest preserves. The third step involves "connecting the dots" by aligning the streets and trails to serve the new homes. Step four, drawing in the lot lines, is the least significant part of the process.

5. **Greenway Design Standards.** While many communities adopt rigid subdivision standards for streets, storm sewers and other "gray infrastructure," few communities adopt adequate standards for the design of open space in conservation subdivisions. The *Growing Greener* ordinance standards require that developers follow a Four-Step design process and determine open space first, not as an afterthought. A list of *Prioritized Resources to be Conserved* guides developers to the most important features to preserve (see Article 6 of the *Growing Greener* model Subdivision ordinances). These standards include, among others, that open space in conservation subdivisions conforms to a community-wide conservation network, thereby ensuring that the community realizes an interconnected open space network that evolves as development occurs.

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