

QUICKNOTES

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Conservation Subdivision Design

A conservation subdivision is a residential subdivision that devotes at least half of its potentially buildable land area to undivided, permanently protected open space. In contrast, conventional subdivisions devote all, or nearly all, buildable land area to individual lots and streets.

Conservation subdivision design can help communities implement a network of permanently protected natural areas. However, subdivision and zoning regulations often discourage or prohibit conservation subdivisions.

BACKGROUND

In the decades following World War II, many urban areas in the United States expanded outward through successive waves of residential subdivision development. Typically, these subdivisions prioritized maximizing the number of buildable lots over protecting natural or cultural resources. In many places, the proliferation of conventional subdivisions has contributed to habitat fragmentation and loss, increased stormwater runoff and erosion, and strained the ability of cities and counties to maintain roads and provide services.

In rural areas, conservation subdivisions offer several advantages to communities over conventional subdivisions. They provide more habitat for wildlife, filter and retain more stormwater runoff, require less new infrastructure, and better maintain a rural sense of place. When developers link open space areas to the open spaces of adjacent subdivisions, conservation subdivisions can contribute to a network of environmental corridors, also known as a green infrastructure network, within or between communities. Conservation subdivisions do not, however, stop urban expansion or reduce automobile dependency.

In recent decades, buyers have demonstrated a willingness to pay a premium for homes in conservation subdivisions, and some developers have embraced conservation subdivision design techniques. Other developers are reluctant to move away from a conventional approach to subdivision design, which remains profitable and popular in many parts of the country. This reluctance is often compounded by local zoning regulations that stipulate large minimum lot sizes, lot frontages, and building set-backs—which make conservation design impractical or impossible—and subdivision regulations that require expensive preliminary design drawings, which discourages developers from making changes in response to community feedback.

IDENTIFY CONSERVATION PRIORITIES

To maximize the benefits of conservation subdivision design, communities must first identify the environmental and cultural resources or features they want to protect from new development. Many cities and counties identify these resources or features during a comprehensive, open space, or green infrastructure plan-making process.

Some features, such as floodplains, wetlands, and steep slopes, may already be protected from new development by existing development regulations. These “primary” conservation features are the community’s highest priorities for conservation. Other “secondary” conservation features and resources are vulnerable to new development. These often include mature woodlands and individual large trees, historic sites and structures, wildlife habitat, prime farmland, groundwater recharge areas, riparian corridors, and scenic viewsheds.



Conservation subdivision design encourages the preservation of environmentally sensitive areas without reducing residential densities.



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UPDATE DEVELOPMENT REGULATIONS

After a community has identified the features and resources it wants to protect from future development, planners and local officials must update the community's zoning and subdivision regulations to require or incentivize conservation subdivision design, either community wide or in certain areas. Typically, this means adopting new provisions that establish conservation subdivision design as a distinct alternative to conventional subdivision design.

These provisions must specify permissible locations for conservation subdivisions, whether conservation subdivision design is required or voluntary, the minimum percentage of the site that must be maintained as protected open space, and permissible deviations from zoning and subdivision standards specifying lot sizes, frontages, setbacks, and street widths. These regulations generally permit developers to create the same number of buildable lots as a conventional subdivision.

Conservation subdivision regulations typically require developers to follow a four-step design process. The first step is identifying conservation areas by overlaying maps of the community's primary and secondary conservation priorities onto a map of the development site and conducting a site analysis to precisely locate these features and resources. Next, developers select individual home sites based on permissible density and a desire to maximize views of and access to the protected open space. Then, developers connect the home sites and accessible open spaces with streets and trails. Finally, developers establish lot lines for each home site.

These regulations must also specify the permissible methods for permanently protecting open spaces. Common methods include conservation easements held by either a land trust or the local government and permanent restrictive covenants. Additionally, conservation subdivision regulations must address responsibilities for open space ownership and maintenance. In many cases, these regulations assign ownership of protected open spaces to a home owner association and require developers to submit a management plan that details responsibilities and guidelines for maintenance.

PROVIDE EDUCATION AND ASSISTANCE

Finally, planners and local officials can increase the likelihood of conservation design supporting the community's vision for land conservation by providing education and assistance to developers and other community members. Developers may be unfamiliar with the conservation subdivision design process. Meanwhile, current residents may be unaware of the potential advantages of conservation subdivisions over conventional subdivisions, and potential owners may be unaware of responsibilities associated with living in a conservation subdivision.

Some cities and counties have produced handouts and guides to explain the concept of conservation subdivision design and summarize local regulations for conservation subdivisions. Others provide technical assistance to developers during the application process to help them refine their designs to maximize open space connectivity without sacrificing the number of buildable lots.

CONCLUSIONS

Conservation subdivision design can help communities protect vulnerable natural and cultural features and resources from new development. Furthermore, when developers widely embrace this approach as an alternative to conventional subdivision design, it can be a valuable tool to help communities establish a local or regional green infrastructure network. To realize and maximize these benefits, communities must explicitly authorize conservation subdivisions in their development regulations and provide education and assistance to communicate the potential trade-offs associated with developing or owning property in conservation subdivisions and to build the technical capacity to embrace new subdivision design techniques.

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FURTHER READING

Published by the American Planning Association

Feiden, Wayne. 2019. "Conservation Limited Development for Local Governments." *PAS Memo*, March/April. Available at planning.org/publications/document/9171905.

Schwab, James C., ed. 2016. *Subdivision Design in Flood Hazard Areas*. PAS Report No. 584. Chicago: American Planning Association. Available at planning.org/publications/report/9112664.

Other Resources

Arendt, Randall. 1999. "Growing Greener: Conservation Subdivision Design." *Planning Commissioners Journal*, Winter. Available at <http://bit.ly/2XPoklv>.

Dexter, Jessica. 2011. "Land Use Tools to Protect Groundwater: Conservation Design." Chicago: Environmental Law & Policy Center. Available at <http://bit.ly/2LUOIN1>.