

# Creating Greenbrier

## Glossary

Note: Where possible, the definitions included in this glossary were taken, verbatim, directly from the West Virginia Code and links to the code have been provided at the end of the definition.

### A

***Agri-business.*** Although the term is generally denote large scale or corporate farming operations, in this plan, agri-business is defined as family-owned or relatively small scale, locally owned, agricultural based businesses, such as wineries connected to vineyards, breweries connected to hop farms, a dairy products operation or retail outlet connected to a dairy farm, greenhouse operations, produce market or stand, a "pick your own" operation, and so forth.

***Agri-tourism*** is tourism centered on agricultural activities, events, and locations. Many of the agricultural businesses fall under the heading of agri-tourism, including "pick your own" operations, pumpkin patches, crop mazes, farm stores, agricultural fairs and festivals, educational programs, operation tours, and farm petting zoos. The State Fair of West Virginia is a large scale example of agri-tourism. While many of the events and activities are either free or fairly inexpensive, agri-tourism, through the sale of produce, value-added products, and souvenirs, represent a method for farmers to participate in and benefit from the tourism economy. See the [Economic Development References and Resources](#) page.

***Alternative Energy Sources.*** Sources of energy that do not involve the burning of fossil fuels and are generally considered to include solar, wind, geothermal, biomass, hydro, and nuclear.

***Alternative Septic (Waste Water) Systems.*** Technically, any system other than the simple gravity design is considered an alternative system. The West Virginia Department of Health and Human Resources allows four primary alternative systems: home aeration systems, low pressure dosing systems, holding tanks, and recirculating sand filters.

## B

**Best Practices.** Practices, policies, techniques, methods, and approaches which work exceptionally well, are widely recognized because they are effective and efficient, and result in net positive results rather than net negative.

**Bioswales** are wide, relatively shallow, open channels designed to slow down the water flow after storms and remove pollutants and silt from stormwater runoff. Bioswales typically have a gentle slope and are landscaped with plant materials known for their ability to absorb water from soils and withstand periods of inundation. Depending on choice of vegetation, bioswales can be used as an integral landscaping feature. See [Environmental Resources: References and Resources](#) for more information

**Broadband.** For the purposes of this plan, broadband refers to hard-wired high-speed internet, or faster internet capabilities, than are available through a direct-dial modem. Because of the presence of the [Quiet Zone](#), hard-wired broadband is preferable to satellite broadband because of potential interference.

## C

**Capital Budget** is a budgetary planning document, part of the budget process, which details proposed capital expenditures (water and sewer, schools, other facilities) and the means for financing them. In general, a capital budget and capital funds are handled separately from a jurisdiction's operating budget and involves a multi-year Capital Improvements Plan (CIP).

**"Capital improvements"** means the following public facilities or assets that are owned, supported or established by county government:

- (1) Water treatment and distribution facilities;
- (2) Wastewater treatment and disposal facilities;
- (3) Sanitary sewers;
- (4) Storm water, drainage, and flood control facilities;
- (5) Public primary and secondary school facilities;
- (6) Public road systems and rights-of-way;
- (7) Parks and recreational facilities; and
- (8) Police, emergency medical, rescue, and fire protection facilities.

"Capital improvements" as defined herein is limited to those improvements that are treated as capitalized expenses according to generally accepted governmental accounting principles and that have an expected useful life of no less than three years. "Capital improvement" does not include costs associated with the operation, repair, maintenance, or full replacement of capital improvements. "Capital improvement" does include reasonable costs for planning, design, engineering, land acquisition, and other costs directly associated with the capital improvements

described herein. (West Virginia Code, [§7-20-3\(a\)](#))

**Citizens Advisory / Action Committee (CAC).** A citizen advisory/action committee is appointed by the County Commission to address a specific issue or inter-related set of issues. Along with Citizen Study Circles, Citizen Advisory /Action Committees are one of the most effective methods of garnering public input and for providing citizen support. CACs range in size from a minimum of seven members up to membership in the mid-twenties. Membership for a CAC is generally drawn from stakeholders and from concerned citizens.

**Community Character.** Qualities and attributes that define the character of a community and make the place different from other places. For example, the narrow streets and large brick homes in Lewisburg, the commercial district fronting the railroad yards in Ronceverte, and the West Virginia Fairgrounds and strip commercial development in Fairlea. Community character can be positive or negative and is influenced by the choices made by residents and by outside forces. For example, the commercial development on the north side of Lewisburg has changed the nature of the place.

**Community Standards.** Community standards are the established patterns of development within a specific community. They may be related to the distance homes are set back from the street, the size of lots, the size of commercial structures, the width of roads, and the range of uses. Requiring new development to meet community standards means that new development must visually and in terms of use "fit in" with existing development rather than "look out of place" or be a disruptive influence on the larger community. For example: a Walmart in Frankford or a six story building in downtown Alderson.

**Comprehensive Plan** means a plan for physical development, including land use, adopted by a governing body, setting forth guidelines, goals and objectives for all activities that affect growth and development in the governing body's jurisdiction. (West Virginia Code, [§8A-1-2\(c\)](#))

**Conservation Design.** Sustainable, controlled growth, development techniques, including Low Impact Development (LID) and clustering and compact development that provide protection to sensitive environmental features and the natural landscape. Typically, conservation design neighborhoods include 50% open space, subsequently set aside in a conservation easement or co-managed through a partnership between the property owners, land trusts or other conservation organizations, and local government. Conservation design developments are one method of protecting source water resources while accommodating new residential development and are most appropriate in the Rural Policy Areas, in karst areas, and along the streams and rivers in Greenbrier County. See Planning and Land Use References and Resources for more information.

**Conservation Easement.** The Greenbrier County Farmland Protection Board defines conservation easements as:

"A conservation easement is a legal document which becomes a permanent part of a deed, once it is placed on a parcel of real estate. The concept is similar to that of mineral or timber rights ownership, wherein one person may own the land, but another may own rights to the timber or minerals it contains. When a conservation easement is placed on property, the owner agrees to relinquish (either by sale or donation) his or her right to use it for most commercial purposes, other than agriculture. Certain tourism related functions are exempt from this restriction, and the definition of agriculture is broad, including such things as tree farming and aquaculture. The owner may sell the property at any time as a whole, but it cannot be sold in parcels, except as provided for in the original terms of the easement.

The restrictions placed on property by a conservation easement are not limited to the original owner. The easement remains in effect from heir to heir, if the property is passed on in this fashion; and from former owner to new owner, whenever the property is sold. Easements, as such, are considered permanent attachments, and can rarely be reversed. "

In West Virginia, conservation easements are established through two separate programs: The Farmland Protection Board and the West Virginia Division of Forestry, through the Cooperative Forest Legacy Program, and in partnership with the West Virginia Land Trust. See Environmental References and Resources for more information

**Consistency** means that land uses are in line with both the letter and the intent of the comprehensive plan. For example, in order to maintain the agricultural integrity of Greenbrier County, the comprehensive plan designates most of the significant agricultural areas as resource stewardship and strongly discourages the creation of residential developments, which generally are sited on agricultural lands. A proposal for a residential subdivision would not be consistent, or in line with the intentions of, the resource stewardship areas, any more than a livestock market in the center of Lewisburg would be consistent with existing land uses. Consistency in land use maintains property values and minimizes negative impacts.

**Critical Features.** Critical features are critical, sensitive, or special features which impose restrictions on land use. Critical features may be historical (sites, buildings, or objects), environmental (caves, sinkholes and other karst features, streams and rivers, springs, wetlands, floodplains, endangered species, or steep slopes), or community facilities (schools, fire/rescue squad facilities, parks, etc.). In general, they are features that have been locally-defined as important or have restrictions imposed by state or federal law.

## D

**Dark Skies.** An initiative to reduce light pollution and make the night sky more visible, reduce energy usage, and diminish the impact of non-natural light on the environment.

**Density.** The limit on the number of units that can be placed on an acre of land. A density of 1 d.u. per acre, means that one primary dwelling unit (du), per acre is allowed. A density of 4 du would allow four dwelling units per acre, while a density of .05 du would allow 1 dwelling unit per twenty acres. Density requirements or restrictions apply to residential uses. Commercial and industrial land coverage is based on floor area ratio (FAR)

**Density, Gross.** Gross density refers to the total acreage of a particular area, whether a parcel or a land use district. Gross density for communities refers to the density of a community at full-buildout. For example, Renick has 400 acres. The density is 1 dwelling unit per acre, or 400 dwelling units, within the community at full buildout. Density is not the same as lot size. For example: Renick may only have 100 acres of land that is actually suitable for residential development, which means that the 400 dwelling would be located on the 100 acres. Some of those dwelling units might be located on a 1 acre parcel; others may be part of an apartment complex which may average 8 dwelling units per acre.

**Density, Net.** Net acreage refers to a parcel after the required acreage for roads, utilities, and open space have been removed. Excluding open space requirements and environmentally-sensitive areas, such as wetlands, required acreage typically accounts for 17% of a parcel's area. For example, a parcel that has 100 gross acres, would have, 83 acres (net) of developable land. Open space requirements are calculated on the gross acreage and added to the required development total to produce developable net. The 100 acre parcel with no open space and no environmental restrictions would allow for the development of a maximum of 83 units, assuming a 1 acre lot per unit. The same 100 acre parcel, with a 25% open space set aside, would allow for the development of a maximum of 174 units, assuming a 1/3 acre lot per unit.

**Density transfer,** as the name implies, is the transfer of density (development rights) from one parcel or landowner to another. It provides landowners in rural and resource stewardship areas a method of making money from development by selling their density to a property in an area where dense development is encouraged. The density transfer should be coupled with the placement of the property under a conservation easement. For example, a 100 acre farm near Renick could be subdivided into ten 10 acre parcels. The development of the 100 acres is not highest and best use of the property, but the farmer or his or her heirs may not feel that there are any other options. Under a density transfer program, the development rights, either through a transfer of development rights (TDR) or a purchase of development rights (PDR) program, the 10 lot rights could be sold and transferred to a property in either the Transition Policy Areas, the Designated Growth Areas, or one of the Rural Communities or Villages and would add 10 lots to the total number of lots that could

be developed on the receiving property. The developer in a growth area would benefit by gaining the right to develop 10 additional lots on the property, and the landowner in Renick would benefit through the sale of the development rights without the expense of developing. Finally, the land would remain agricultural, under a conservation easement. See Land Use and Planning References and Resources for more information on PDRs and TDRs.

***Depth to Bedrock.*** The distance, in linear feet, between the surface and the underlying bedrock.

***Designated Growth Area.*** Designated Growth Areas are areas or districts which are deemed to be appropriate for the full range of development (commercial, residential, industrial), are served by public water and sewer, and are adjacent to major transportation corridors.

## E

***Ethics of Reciprocity.*** More typically referred to as the Golden Rule. In planning and land use, the ethics of reciprocity dictates that neighbors and landowners consider the impact of their land use decisions on their neighbors and actively work to minimize the impacts, such as shielding lights, mitigating stormwater runoff, addressing nuisances, and maintaining property. Essentially, it means being a responsible neighbor.

***Externalities.*** Externalities are the side-effects, by-products, or impacts of an action on non-consenting parties, who gain no benefit from the action. For example, a developer creates a 40 lot subdivision in a rural area with karst terrain. The subdivision introduces 40 additional septic tanks and 40 additional wells, the potential for an additional 24 children (assuming .6 children per household) in the public schools, and an additional 400 car trips (10 per household per day) on a rural road. The development introduces more traffic on a rural road, more children into a crowded school, and more runoff into the groundwater, from yards, roads, and, potentially septic systems. These impacts are externalities and have an impact on neighboring properties and the broader community. In addition, they generate costs (expansion of the road network, an additional teacher in the local school, lower groundwater levels that mean redrilling neighboring wells) that are paid for, in large part, by the broader community rather than the developer, even though the community does not gain financial benefit from the development.

## F

***Factory-built homes*** means modular and manufactured homes.(West Virginia Code, [§8A-1-2\(i\)](#)). It should be noted that manufactured homes and modular homes are not the same. Manufactured Homes must meet HUD standards and are completely constructed in the factory, while modular homes must meet building code standards and are partially constructed and completely finished onsite.

***Farmland of Local Importance.*** In some local areas, there is concern for certain additional farmlands for the production of food, feed, fiber, forage, and oilseed crops, even though these lands are not identified as having national or statewide importance. Where appropriate, these lands are to be identified by the local agency or agencies concerned. In places, additional farmlands of local importance may include tracts of land that have been designated for agriculture by local ordinance. (657.5[d]).

***Farmlands, Prime,*** "Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses (the land could be cropland, pastureland, rangeland, forest land, or other land, but not urban built-up land or water). It has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed, including water management, according to acceptable farming methods. In general, prime farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks. They are permeable to water and air. Prime farmlands are not excessively erodible or saturated with water for a long period of time, and they either do not flood frequently or are protected from flooding." (657.5[a])

***Farmland of Statewide Importance.*** This is land, in addition to prime and unique farmlands, that is of statewide importance for the production of food, feed, fiber, forage, and oil seed crops. Criteria for defining and delineating this land are to be determined by the appropriate state agency or agencies. Generally, additional farmlands of statewide importance include those that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce as high a yield as prime farmlands if conditions are favorable. In some states, additional farmlands of statewide importance may include tracts of land that have been designated for agriculture by state law. (675.5[c]).

***Farmland, Unique.*** "Unique farmland is land other than prime farmland that is used for the production of specific high value food and fiber crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality and/or high yields of a specific crop when treated and managed according to acceptable farming methods. Examples of such crops are citrus, tree nuts, olives, cranberries, fruit, and vegetables. (657.5[b]) Local examples, in Greenbrier, may include lands ideal for growing hops, grapes, or other crops specific to an industry.

***Farm Land Protection Board.*** A program established by the State of West Virginia in 2000 under the Voluntary Farmland Protection Act (8A-12-21) in order to help sustain farms in West Virginia, control urban expansion and the impact of growth, preserve farmland as openspace, promote tourism, and support and protect "worthwhile community values, institutions and landscapes which are inseparably

associated with traditional farming" (West Virginia Farmland Protection, 2009)

***Flexible (Flex) Land Use Ordinance.*** Under traditional zoning ordinances, one size fits all. A residential district has setbacks of a set amount and are applied to all new development, single home or a 100 lot subdivision, regardless of whether the setbacks match the setbacks for existing properties. Flexible ordinances are designed to work with citizens and developers, communities and neighborhoods to maintain their community character and development patterns while accommodating new development. Flex land use ordinances rely on a combination of consistency, both with the comprehensive plan and community standards, performance standards, and impact mitigation. Because they are not as rigid as the more traditional approaches, they require significantly more staff and planning commission time to implement and maintain. Performance standards may include low impact development, LEED, conservation, green development, or other mitigation requirements meant to improve the overall quality of the development.

***Floodplain.*** A flat or slightly sloping plain adjacent to a stream or river. A flood zone, which includes both the flat and slightly sloping areas that are prone to flooding, has two parts: the floodway (the area of the plain that floods on a regular basis) and the flood fringe (the area of a floodplain that does not flood during a 1 year, five year, or even a 20 year storm event, but does flood during a 100 year flood event).

***Flood-prone area*** means any land area susceptible to repeated inundation by water from any source.(West Virginia Code, [§8A-1-2\(j\)](#))

***Floor Area Ratio.*** Floor area ratio (FAR) is the ratio between the size of a building and the size of the parcel, both of which are typically calculated in square footage (1 acre - 43,560 square feet) and used to limit the size of a commercial or industrial structure on a property or in an area. For example: a FAR of .4 means that 40% of a parcel can be covered by a commercial or industrial structure or structures. If the parcel is one acre (43,560 square feet), then the structure or structures on the property may not exceed more than 17,424 square feet. Floor Area Ratio is not the same as percentage of impervious surface. If a property has required open space or a limit on the amount of [impervious surface](#), there may be further limitations on the size of the structure or structures.

***Focused Growth*** is a specific approach to growth management. As the name implies, a focused growth approach focuses growth into specific designated areas in order to 1) minimize the cost of development overall, including infrastructure costs; and 2) minimize the impact of development in areas where development is less suited or unsuited. A focused approach can be general (new development should occur in designated growth areas and existing communities) or it can be far more specific (new industrial development should be focused in a specific designated growth area, while residential development should be focused in a different growth area). A general approach assumes that all designated growth areas are similar and are equally well suited; a specific approach recognizes differences between

designated growth areas or differences in the types of growth that are or will be occurring in neighboring jurisdictions. The Greenbrier County comprehensive plan utilizes a specific focused growth approach rather than a general approach due to environmental and development pattern differences.

**Foreign Trade Zones (FTZ).** There are two types of foreign trade zones: general purpose and subzones. According to the International Trade Administration: "State or local governments, port authorities, nonprofit organizations, or economic development agencies typically sponsor general-purpose zones. General-purpose zones involve public facilities that can be used by more than one firm, and are most commonly ports or industrial parks used by small to medium sized businesses for warehousing/distribution and some processing/assembly. Subzones, on the other hand, are sponsored by general-purpose zones, but typically involve a single firm's site which is used for more extensive manufacturing/ processing or warehousing/distribution that cannot easily be accomplished in a general-purpose zone." A good example of a general purpose foreign trade zone is located at the New River Valley Airport in Dublin (Pulaski County), Virginia and is administered by the Economic Development Authority. For more information, see Economic Development References and Resources.

## G

**Geographic Information System (GIS).** Computer-based mapping system that combines geographically referenced information (roads, streams, population, and so forth) with a graphic capabilities in order to produce maps. The GIS program allows the user to capture, store, update, manipulate, analyze, and display, in the form of maps, geographically-based information.

**Geotechnical Study or Report** are engineering studies / reports which address the issue of the carrying capacity and characteristics of soil, bedrock, and other subsurface conditions, assess potential risks for a specific site, including the potential for subsidence, and set of circumstances, and design engineering solutions for foundations, earthworks, pavement subgrades and so forth.

**"Growth county"** means any county within the state with an averaged population growth rate in excess of one percent per year as determined from the most recent decennial census counts and forecasted, within decennial census count years, by official records of government or generally approved standard statistical estimate procedures: Provided, That once "growth county" status is achieved it is permanent in nature and the powers derived hereby are continued. (West Virginia Code, [§7-20-3\(e\)](#)).

## H

**Heavy Metals.** Relatively high density, metallic chemical elements that are either toxic or poisonous at low concentrations. Examples include mercury, cadmium, lead,

chromium, zinc, and manganese. Some heavy metals naturally occur in surface, others are from anthropogenic (human) sources or actions (e.g. lead pipes, stormwater runoff from parking lots, or by-products of mining).

**Historic district** means a geographically definable area, designated as historic on a national, state or local register, possessing a significant concentration, linkage or continuity of sites, buildings, structures or objects united historically or aesthetically by plan or physical development. (West Virginia Code, [§8A-1-2\(l\)](#) or "a group of buildings, structures, or sites that taken together make up a coherent whole with similar historic or architectural meaning that is listed in the National Register of Historic Places (West Virginia Code [§11-21-8g\(a\)\(4\)](#)). For more information on historic districts in Greenbrier County, please see [Cultural and Historic Trends](#) and [Resources and References](#).

**Historic landmark** means a site, building, structure, or object designated as historic on a national, state or local register. (West Virginia Code, [§8A-1-2\(m\)](#)).

**Historic site** means the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure whether standing, ruined or vanished, where the location itself possesses historical, cultural or archaeological value regardless of the value of any existing structure and designated as historic on a national, state or local register. (West Virginia Code, [§8A-1-2\(n\)](#)). For more information on historic districts in Greenbrier County, please see [Cultural and Historic Trends](#) and [Resources and References](#).

## I

**Impact Analysis.** An impact analysis examines a proposed land use in terms of its impact on environmental resources, neighboring land uses, historic resources, community facilities and services (such as schools, fire and rescue, and public safety), the transportation network, and public utilities. It is important to recognize, up front, that all land uses have some impact. For example, a new residential subdivision may introduce different land use patterns in a neighborhood. The subdivision will generate increased traffic (calculated by multiplying the number of proposed dwelling units by 10) and will introduce new students into local schools (calculated by multiplying average family size, minus 2, by the number of proposed units). A subdivision of 100 new dwelling units, in a jurisdiction with an average family size of 2.6, then, would create an additional 1000 car trips per day and introduce an additional 60 students into area classrooms. If the local roads are under utilized or have relatively high levels of service (LOS), then the additional car trips may have negligible impact. The same is true for the schools. However, if the subdivision is developed on a road that is not designed to accommodate the new level of traffic or is located in a school district with near, at, or above capacity schools, then a mitigation plan should be submitted for how the developer plans on mitigating the impacts of their development. A detailed impact analysis will tell both the developer and the planners whether the proposed location is suitable for a

specific type of development before the developer has over-invested or will provide a guide for determining impact mitigation steps before negative impacts have occurred which can not be easily corrected.

**Impact fees** means any charge, fee, or assessment levied as a condition of the following: (1) Issuance of a subdivision or site plan approval; (2) issuance of a building permit; and (3) approval of a certificate of occupancy, or other development or construction approval when any portion of the revenues collected is intended to fund any portion of the costs of capital improvements for any public facilities or county services not otherwise permitted by law. An impact fee does not include charges for remodeling, rehabilitation, or other improvements to an existing structure or rebuilding a damaged structure, provided there is no increase in gross floor area or in the number of dwelling units that result therefrom. (West Virginia Code, [§7-20-3 \(g\)](#))

**Impact Mitigation Plan.** An impact mitigation plan provides specific detailed steps for mitigating the impact of a proposed development. For example, a developer proposes creating a subdivision in an area with stormwater runoff problems and a narrow, unpaved access road. The impact mitigation plan would detail how the developer proposes to address post development stormwater and erosion, sediment, and stormwater problems during development, and upgrade the access road to meet the expanded needs created by his or her development. The primary purpose of both the impact analysis and the impact mitigation plan is to lessen the cost of development, both in terms of physical and financial costs, on the general public (also known as public subsidization) and transfer the costs of development back to the developer who is, ultimately, profiting from the development.

**Impervious Surface.** A surface (pavement, roofs, and other land coverage) which does not allow the infiltration of water (the flow or seepage of water through the surface). An impervious surface requirement limits the amount of impervious surface on a parcel and is typically expressed as a percentage. Semi-pervious surfaces (for example, gravel driveways) may allow some seepage through the surface and are not counted as impervious surface; however, they do not count as part of the open space requirements. For example, an industrial property may have a floor area ratio of .4, 20% open space requirement and an 80% impervious surface requirement on a 1 acre parcel (43,560 square feet). This means that 8,712 square feet must be treated as open space and 34,848 square feet may be covered with impervious surfaces. If the floor area ratio is .4, then the structure or structures may take up 17,424 square feet, leaving 17,424 square feet for pavement, sidewalks, and other impervious surfaces. If the impervious surface requirement is less than 80%, then the amount of pavement or the size of the structure may need to be reduce or a semi-pervious surface may need to be used in place of solid pavement.

**Infill Development** is the development of 1) vacant lots within currently developed areas or 2) lots with development within currently developed areas which can not, realistically, be rehabilitated or restored. In general, infill development should fit with the character of the neighborhood or community in which it is being

developed in order to visually "fit." An example of poor infill development would be constructing a "modern" office building with no porch and a paved parking lot in front of the structure in a neighborhood of 1920s bungalows with porches and front yards. Development that is visually "at odds" with surround properties have a visual impact on the cohesiveness of the neighborhood and will lower property values in the long run. Requiring community standard and development pattern provisions are two ways of addressing potential issues created by infill development.

## K

***Karst.*** [8 Rivers Safe Development](#) defines karst as " an erosional landscape in which all rainfall drains underground through sinkholes and sinking streams into caves and underground rivers. Karst terrains usually form on limestone where cracks and fissures become enlarged through solution and water drains to springs on land or in rivers." In simpler terms, the karst system in the central portion of the county functions as, essentially, a plumbing system. The sinkholes and fissures are the equivalent of drains, the caves pipes, and the springs outlets into the larger drainage system. Anything that is put down a drain will, eventually, come out the tap. In Greenbrier County, the majority of water for the City of Lewisburg and the Towns of Ronceverte and Alderson comes from Davis Spring and the Greenbrier River, which are the outflow points for the plumbing system. Contaminants introduced through the drains (sinkholes and fissures) will, invariably, end up in the drinking water supply, not only in Greenbrier County, but in the counties downstream.

## L

***Land Trust.*** A non-profit organization or charitable corporation focused on conserving land, in the public interest, through the purchase of or through the acceptance of conservation easements and other forms land transactions and land donations.

***Land Use Policy Areas.*** Comprehensive planning policy designation, a land use policy area is not a zoning district and are not written in ordinance language. Land use policy areas are typically fairly large and are provided as a way of identify lands by broader definitions of use and general characteristics rather than the more specific definitions and restrictions incorporated into zoning and subdivision ordinances. For example, Frankford is designated as a rural village, a broad definition of the village as a whole. Under a zoning ordinance, Frankford would be divided into different zones. The village might have an industrial area designated as M1 (heavy industrial) or ML (light industrial), a commercial district designated as CB (community business) or GB (general business), and a variety of residential areas with different designated densities, some allowing quarter acre lots, others requiring one acre lots. One of the residential districts may allow manufactured housing, another may prohibit single-wides and duplexes. Under the land use planning policy, residential development and village-scale commercial and industrial development are deemed appropriate, as long as they fit with the character of the community and

do not undermine the integrity of the community or present hazards.

**Leapfrog Development.** Development beyond the boundaries of areas of existing development. If leapfrog development is tied to the provision of public water and sewer, the land between the new development and the existing jurisdiction will develop over time because of access to public utilities and infrastructure.

**LEED (Leadership in Energy and Environmental Design).** The LEED Green Building Rating System" is a benchmark system for design, development, construction, and operation high performance green buildings, which use sustainable construction methods and materials. For residential development, the LEED rating system insures that a home is both energy efficient and resource efficient. In 2008, The National Association of Home Builders (NAHB) approved the National Green Building Standards, based on the American National Standards Institute (ANSI). The NAHB standards are similar to the LEED standards, although they are not as stringent.

**Low Impact Design / Development (LID)** "A sustainable landscaping approach that be used to replicate or restore natural watershed functions and/ or address targeted watershed goals and objectives." (EPA 2008). Low Impact Design techniques include: bioretention (rain gardens, swales, green roofs, permeable pavers, rain barrels and cisterns, soil amendments, tree box filters.

## M

**Manufactured home** means housing built in a factory according to the federal manufactured home construction and safety standards effective the fifteenth day of June, one thousand nine hundred seventy-six. (West Virginia Code, [§8A-1-2\(r\)](#))

**Modular home** means housing built in a factory that meets state or local building codes where the homes will be sited. (West Virginia Code, [§8A-1-2\(s\)](#))

## O

**Open Government** means that government is open to all levels of public scrutiny and oversight. The basic premise of open government is that public business should be public and should avoid the perception of doing business "behind closed doors." At the local level, open approaches to government emphasize public involvement, public information, and public education.

## P

**Performance Standards.** Regulatory requirements designed to insure a specific outcome and are generally used to address stormwater issues or potential nuisances.

**Pocket Service Areas.** Pocket service areas are geographically limited public water and sewer systems that are part of a larger public service authority's operations, but are not connected to the broader system due to distance or terrain.

**Preferred development area** means a geographically defined area where incentives may be used to encourage development, infill development or redevelopment in order to promote well designed and coordinated communities. (West Virginia Code, [§8A-1-2\(y\)](#))

**Proactive and Reactive Planning.** Planning can be proactive or reactive in nature. For most rural jurisdictions, planning typically is reactive in that Planning Commission, County Commissions, staff, and citizens react, after the fact, to a specific situation or set of circumstances: a subdivision sited on a locally important piece of land, a high-impact commercial, industrial, or recreational use, such as a shooting range, constructed in an area that is predominantly residential or agricultural, and so forth. Reactive planning means that land development is being controlled by and guided by outside forces (developers, corporations, etc.) and local jurisdictions and citizens are left to react to the changes and have no recourse to either stop the development or mitigate the impacts. Proactive planning provides citizens, neighborhoods, and local government with the tools to guide development and mitigate potentially negative impacts before the development occurs.

**Public place** means any lots, tracts or parcels of land, structures, buildings or parts thereof owned or leased by a governing body or unit of government. (West Virginia Code, [§8A-1-2\(y\)](#))

**Purchase of Development Rights (PDR).** See density transfer.

## Q

**Quiet Zone.** The National Radio Quiet Zone, established by the Federal Communications Commission and the Interdepartmental Radio Advisory Committee in 1958, is 13,000 square mile area surrounding the National Radio Astronomy Observatory in Green Bank, WV and the radio receiving facility for the US Navy in Sugar Grove West Virginia. According to the National Radio Astronomy Observatory, radio astronomy studies electromagnetic radiation, emitted by celestial bodies, outside of earth's atmosphere. In order to work, man-made interference must be either eliminated or controlled. For more information on the National Radio Quiet Zone, please see the information from the [National Radio Astronomy Observatory](#).

## R

**Rain Gardens.** A depression or low area, planted with native perennial plants, designed to slow peak flow and absorb stormwater runoff from impervious surfaces, including parking lots, roofs, driveways, walkways, roads, and so forth. Common plants used in rain gardens include: irises, day lilies, cardinal flower, ironweed, sedge, elderberry, silky dogwood, and others. While rain gardens may have some specialty or ornamental grasses, grass, in general, should not be used because the root system does not do well in prolonged wetness.

**Right-to-Farm.** According to the American Farm Trust:

Right-to-farm laws are designed to accomplish one or both of the following objectives: (1) to strengthen the legal position of farmers when neighbors sue them for private nuisance; and (2) to protect farmers from anti-nuisance ordinances and unreasonable controls on farming operations. Most laws include a number of additional protections. Right-to-farm provisions may also be included in state zoning enabling laws, and farmers with land enrolled in an agricultural district may have stronger right-to-farm protection than other farmers. A growing number of counties and municipalities are passing their own right-to-farm legislation to supplement the protection provided by state law.

While right-to-farm acts and ordinances offer some protection against nuisance complaints, it should be noted that they do not protect farmers from laws or ordinances meant to protect public health, safety, or morals or actions that may damage public resources, like water supplies.

**Roads, Classification** (See [Streets](#)). Road classification definitions are taken from the 2001 "[As a Matter of Fact](#)," West Virginia Department of Transportation.

- *Expressways (X)* – connect metropolitan areas and provide service to major interstate and intrastate travel
- *Trunklines (T)* – intrastate network intended to serve smaller cities
- *Feeders (F)* – serve smaller towns and industrial and recreational areas not served by the higher systems, while collecting traffic for the higher systems
- *State Local Service (SLS)* – localized arterial and spur roads which provide access and socio-economic benefits to abutting properties; due to the large range of service this classification provides, it is necessary to further sub-classify as follows:
  - *Essential Arterial* – provides primary access between small population centers or localities
  - *Collector* – collects travel from the lower systems and distributes it to the higher systems
  - *Land Access* – provides access to any land area or associated improvement; also includes the following two subsystems:

- *Home Access Road Program (HARP)* – the HARP system was established in 1998 to provide maintenance for those public roads serving as mail routes, school bus routes, etc., which were not (at that time) under the jurisdiction of the Division of Highways;
- *State Park and Forest Roads* – provide access within these areas for recreational and/or commercial (e.g., logging, mining, etc.) purposes; responsibility for the construction and maintenance of roads on publicly-owned lands within State parks and forests, and public hunting and fishing areas, was transferred from the Department of Natural Resources to the Department of Highways by legislative action in 1972
- *Occasional Use* – lowest classification of a local road; provides access to a rural area on a low-volume basis.

**Roads, Internal.** Internal roads are new roads which service a specific development and can either be privately owned or publicly dedicated.

**Roads, Private.** Roads which are not part of the WVDoT system, are privately owned, and maintained either by the developer, through a neighborhood agreement, or by a homeowners association. Maintenance includes resurfacing, easement maintenance, and snow removal.

**Roads, Public.** Roads which are part of the WVDoT system and are publicly owned and maintained, including resurfacing, expansion, easement maintenance, and snow removal.

## S

**Shrink-Swell Soils.** Soils that change in volume based on moisture content.

**Sight Distance.** Sight distance is a function of design speed (miles per hour), so new driveways and new street/road intersections connecting to an existing road with a lower speed limit will have a shorter required sight distance than for those connecting to an existing road with a higher speed limit. For example, a new intersection on a road with a speed limit of 25 mph will have a stopping sight distance (the distance required to come to a full stop on the existing road) of 155 feet in either direction. A new intersection on an existing road with a speed limit of 40 mph is 305 feet and with a speed limit of 55 mph is 495 feet in either direction.

**Slope.** The grade of a geographic or physical feature, like a hill or a ramp, calculated by dividing rise (height or elevation) by run (distance). Land with slopes below 8% are far more likely to have prime farm soils. In development, as in farming, land with a slope of 8% or less is suitable for medium or higher intensity uses. As the grade increases above 8%, allowable density decreases. Slopes above 25% should not be developed because of the potential for damaging runoff, among other reasons.

**Small Farm.** A farm where the farmer or farm family participates in the day-to-day labor and management of the farm, and owns or leases its productive assets.

**Solid Waste.** According to the definition provided by the Greenbrier County Solid Waste Authority, solid waste includes "includes but is not limited to newspaper, bottles, garbage, trash, discarded household furniture, appliances, tires, carcasses of dead animals, cigarette butts, shingles, construction and demolition waste and other waste materials." It does not include "gas tanks, batteries, asbestos, oils, anti-freeze, free liquids, tanks or drums that have not been rinsed and crushed, and hazardous waste of any kind."

**Sprawl** means poorly planned or uncontrolled growth, usually of a low-density nature, within previously rural areas, that is land consumptive, auto-dependent, designed without respect to its surroundings, and some distance from existing development and infrastructure. (West Virginia Code, [§8A-1-2\(aa\)](#))

**Streets** means streets, avenues, boulevards, highways, roads, lanes, alleys and all public ways. (West Virginia Code, [§8A-1-2\(bb\)](#))

**Subsidence.** Subsidence, the either gradual sinking or abrupt collapse of the ground, can happen naturally (in the case of sinkholes and caves) or can be the result of human activity (mining or other underground activity). While subsidence can occur over a long period of time, specific actions will increase the likelihood of an abrupt collapse, including introducing increased weight (typically a structure) that is greater than the structural capacity of the underlying geology, it can also occur as a result of the extraction of natural gas and groundwater.

**Sustainable Development.** Sustainable development is development that meets current needs while preserving the environment and non-renewable resources to meet future needs.

## T

**Traditional Neighborhood Design (TND).** While TND is a fairly recent buzzword, it is not a new concept. Drive into Lewisburg or Ronceverte or any other town, city, or village in Greenbrier County and look around. You are looking at a TND. TNDs are characterized by a mixed use approach to development that creates a core made up of mixed commercial, residential, and public uses, and surrounded by mixed residential neighborhoods with smaller lots, narrower roads, smaller setbacks, sidewalks, neighborhood "pocket" parks, and other "neighborhood" amenities.

**Transfer of Development Rights (TDR).** See density transfer.

## U

**"Unincorporated area"** and "total unincorporated area" means all lands and resident estates of a county that are not included within the corporate, annexed areas or legal service areas of an incorporated or chartered municipality, city, town or village located in the state of West Virginia. (West Virginia Code, [§7-20-3 \(i\)](#))

**Urban Growth Boundaries.** Urban Growth Boundaries (UGB) are a planning tool to help counties contain urban sprawl by concentrating development into specific areas. The Greenbrier UGBs should provide enough land to accommodate 20 years of growth and should be reviewed by the Planning Commission and the County Commission every five years. For UGBs to work, they must be treated as "fixed" boundaries and should not be arbitrarily changed to accommodate single development requests. Requests for medium and high density and high impact development outside of the designated growth areas should be denied. Typically, UGB's only work if they accompanied by other policies which encourage redevelopment and infill development within existing jurisdictions and provide enough developable land to balance citizens' and government's desire to control growth and the residential, commercial, and industrial development requirements.

**Utility** means a public or private distribution service to the public that is regulated by the public service commission. (West Virginia Code, [§8A-1-2\(ff\)](#))

**Utilities and Equipment, Essential** means underground or overhead electrical, gas, communications not regulated by the federal communications commission, water and sewage systems, including pole structures, towers, wires, lines, mains, drains, sewers, conduits, cables, fire alarm boxes, public telephone structures, police call boxes, traffic signals, hydrants, regulating and measuring devices and the structures in which they are housed, and other similar equipment accessories in connection therewith. Essential utility equipment is recognized in three categories

- (1) Local serving;
- (2) Nonlocal or transmission through the county or municipality; and
- (3) Water and sewer systems, the activities of which are regulated, in whole or in part, by one or more of the following state agencies:
  - (A) Public service commission;
  - (B) Department of environmental protection; or
  - (C) The department of health and human resources

(West Virginia Code, [§8A-1-2\(f\)](#)).

## **W**

**Wetlands.** An area where the soil that is typically saturated with ground or surface water, such as bogs, marshes, or swamps.

## **Z**

**Zoning** means the division of a municipality or county into districts or zones which specify permitted and conditional uses and development standards for real property within the districts or zones. (West Virginia Code, [§8A-1-2\(gg\)](#))

**Zoning map** means a map that geographically illustrates all zoning district boundaries within a municipality or county, as described within the zoning ordinance, and which is certified as the official zoning map for the municipality or county. (West Virginia Code, [§8A-1-2\(hh\)](#))

**Zoning ordinance, non-traditional** means an ordinance that sets forth development standards and approval processes for land uses within the jurisdiction, but does not necessarily divide the jurisdiction into distinct zoning classifications or districts requiring strict separation of different uses, and does not require a zoning map amendment. (West Virginia Code, [§8A-1-2\(t\)](#))

# Creating Greenbrier

## Maps

### Map Index

1. Greenbrier County Future Land Use Map.....	187
2. County and Municipal Boundaries.....	188
3. Current Zoning.....	189
4. Industrial Business.....	190
5. Structures.....	191
6. Infrastructure and Services.....	192
7. Transportation.....	193
8. Historical Districts and Structures.....	194
9. Land Use.....	195
10. Elevation and DEM.....	196
11. Natural Hazards.....	197
12. Water Resources.....	198