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## Home-siting for New Rural Residents

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The prospect of owning a piece of the American West is exciting to any new rural property owner in Arizona. Beautiful vistas, plenty of sunshine and interesting wildlife are among the dozens of reasons people choose to find property and relocate to the mountains and deserts of our state. But choosing the right spot to build that dream home on a vacant piece of property is just as important as choosing the property itself.

Throughout rural Arizona, the size of anyone's property may vary depending on the local jurisdiction's zoning. But, in general, properties in rural areas will be at least an acre in size or greater, unless they are part of a platted subdivision where wastewater treatment and community water supplies are provided. Per Arizona statutes governing water quality, private wells and septic systems need at least 100 feet of separation to avoid well contamination, and that includes separation from neighboring wells and septic systems. In order to accomplish that level of separation, properties should be at least an acre, or 43,560 square feet, in size.

So the first thing that any new property owner should take into consideration when planning on where to build their new home, is the relationship of the home to either existing or planned utilities, such as electricity, wells and septic systems. This assumes the property is suitable in the first place for any of these utilities. A new property may be located miles from the nearest power lines. Or the property may consist of a lot of bedrock if in the mountains, which makes drilling a well and installing a conventional septic system infeasible. If this is the case, the new property owner will need to investigate alternative energy sources such as solar panels or wind turbines, or alternative water supplies such as harvested rainwater or hauled water. If the property is not suitable for a conventional septic system due to the presence of bedrock or soils with low percolation rates, then on-site alternative wastewater treatment, such as composting toilets, will need to be considered. Arizona's Department of Environmental Quality (ADEQ) along with the local jurisdictions' health/sanitation departments, regulate the use of alternative systems. Constructing a house too far from its utilities could result in expensive trenching and piping, so careful planning is warranted.

Siting a home in relationship to the sun is also an important consideration, especially if a home is being designed to maximize its passive or active solar capacity. The sun is Arizona's most plentiful, renewable energy source. To maximize rooftop solar exposure, houses should be aligned in an east-west orientation. To reduce energy costs, shade trees planted or kept in place on the south and south west sides of a home will keep the house cooler in summer, yet increase solar gain during the winter months when there are no leaves on the trees.

Although the desire on the part of new, rural property owners may be to remain as isolated as possible, neighboring property owners are almost always a reality. The old adage that "good fences make good neighbors" applies to those parts of Arizona where open range laws apply, whereby it is the responsibility of land owners to fence out any unwanted livestock from their property.

Taking into account the distance your new home is set back from other neighboring properties is also important. Most rural jurisdictions have a regulatory set back for new homes that requires a minimum distance between the new construction and that property's legal boundaries and adjacent roads. This usually isn't a problem on larger properties where there is lots of space to decide on where a new home may be located and still be able to have plenty of a buffer between a new house and its next nearest neighbor. However, on smaller or constrained properties, setting back a minimum distance may require more careful planning. This is as much for the property owner's benefit as it is for his/her neighbor, to avoid encroachment into each other's personal enjoyment of their property.

Although most of rural Arizona is classified as "desert", flooding can be a very real danger. The dry washes or arroyos bisecting a property may look deceptively benign. But after a one inch rainfall, they may fill up quickly. Most jurisdictions have floodplain regulations that mandate a set back from dry washes to avoid bank erosion or catastrophic flooding of homes. Many areas in Arizona experience "sheet flow" where run-off from storm events doesn't concentrate in washes, but rather, occurs in wide, shallow flows across the landscape. To be sure that a new home is not being

sited in one of these sheet flow areas, a property owner should avoid parts of his/her property where there are silt deposits and other evidence of water running across swaths of land.

Lastly, new property owners should take careful stock of their land's natural inhabitants before siting their home. Many rural properties in Arizona provide important habitat for the area's natural denizens. This habitat may be grasslands or desert scrub, pine forests or riparian woodlands. In any case, attention to a property's wildlife and vegetation will help site a new home in a location that disturbs these important resources as little as possible.



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