

Vance County Water District

Information on the Advantages of a Central Water System

2009

Safe and Reliable Source of Quality Drinking Water

Safety. From an environmental standpoint, *a secured, regulated, constantly monitored water system is invaluable.* A water system is not nearly as subject to contamination as are private wells. In a central system, water is continuously sampled, tested, and monitored. It is a safe means of providing drinking water to citizens.

Reliability. Whether in power outages, drought conditions, or other situations, *a rural water system will be an ongoing and sustainable source of drinking water.* Kerr Lake has an abundant amount of water and represents an ongoing supply for the future. A centralized water system is a reliable alternative to the unreliable.

Quality. *Water quality will always be constant with a rural water system.* While Vance County is fortunate to have relatively good groundwater, there are always cases of occasional contamination due to petroleum spills, poor construction, or other problems. However, a more common problem as expressed at public information sessions held on this subject in Vance County in 2005 and 2006, is that of undesirable water quality - that which is technically safe but has a distinct discoloration, a noticeable odor, or high mineral content that renders the water as undesirable. In such cases, it is not unusual for there to be a yellowing of light-colored clothing or staining of appliances, sinks, commodes, showers, and bathtubs. To cope with these situations, citizens have to bring their laundry into town for cleaning, purchase bottled water, and/or install filtering devices which represent an ongoing cost.

Benefit to Vance County Citizens: There is an obvious health advantage to all citizens by having safe and qualitative drinking water. During times of crisis and/or natural disaster, safe and reliable water can help meet the needs of individuals and communities and thus allow them to cope with the challenges at hand and focus on recovery. Whether a valid contamination issue or one of undesirability, all residents deserve the opportunity to have safe, potable drinking water.

Drought Resistance

Current Drought Conditions. For several months in late 2007 and into early 2008,

Vance County has experienced the most severe degree of drought - EXCEPTIONAL - which has created serious concerns and problems for rural homeowners with well water. Some property owners have incurred the expense of constructing new wells as wells have either completely dried up or water flows have been significantly reduced during such dry conditions. **Benefit to Vance County Citizens:** Kerr Lake has continued to provide an uninterrupted source of quality drinking water for its users, even during such extreme droughts. This plentiful water supply continues to amply serve the member units of the Kerr Lake Regional Water System, the communities which purchase water from KLRWS, and even to the Virginia Beach area. An abundant water supply during severe drought situations is readily available to supply users of the proposed water system in Vance County.

Supports Existing Fire Protection Systems

Rural Fire Protection. Vance County citizens are served by volunteer fire departments and a County fire department. As identified in a professional study of fire and emergency medical services issued this spring, an adequate water supply is a major need in fighting fires in rural areas. Volunteer firefighters have repeatedly emphasized the need for rural water to help them fight fires in their communities. Fire hydrants will be placed on water lines that are 6" in diameter and larger. **Benefit to Vance County Citizens:** These fire hydrants can offer volunteer and County departments a quick and reliable water supply during emergency situations, which can result in a significant savings of time and resources to volunteer firefighters and property owners.

Potential to Reduce Fire Insurance Rates

Rural Fire Insurance. Most rural fire districts in Vance County have a 9S fire insurance rating, which impacts fire insurance premiums for homeowners. A lowered fire insurance rating may help to lower fire insurance premiums for homeowners. There are three basic categories of requirements for volunteer fire departments to obtain approval by the NC Department of Insurance for lower fire insurance ratings - availability of water, staffing (people), and equipment. The availability of water will not necessarily guarantee lower fire insurance premiums, but it is an essential requirement. **Benefit to Vance County Citizens:** A rural water system with ample fire hydrants will improve the likelihood of volunteer fire departments being able to pass inspections necessary to improve fire insurance ratings. This has the potential to save homeowners money by reduced fire insurance premiums.

Keep Kerr Lake Water at Home

Attraction to Other Communities. Although the water supply at Kerr Lake is not endless, it must appear that way to nearby communities, large cities, and urban counties. Due to the large supply, all of the water resources at Kerr Lake are not allocated. The current drought has forced larger metropolitan areas to investigate all available options for obtaining adequate water supplies to serve businesses, residences, and institutions. As addressed in recent coverage by a Raleigh television station, the U.S. Army Corps of Engineers is currently studying the availability of water for other cities from Kerr Lake. ***Benefit to Vance County Citizens:*** There is an adequate supply of water at Kerr Lake which is available *now* to rural Vance County. Large cities, urban counties, and others are aware of the opportunity which currently exists and some are exploring the feasibility of obtaining water from Kerr Lake to serve their citizens. While there is still an unallocated supply of water at Kerr Lake, Vance County citizens deserve the opportunity to have water allocated for their own use.

Eliminate Up-Front Costs of Wells and Pumps

Wells and Pumps are Costly. Although it is often said that well water is free, there is a definite cost associated with wells. The most significant cost that homeowners face with wells is the initial construction and installation. Digging or boring new wells, particularly during drought conditions, can be expensive. Costs vary from a couple of thousand dollars to as much as seven or eight thousand, depending upon depth, size, contractor rates, etc. Pumps are also expensive and have operational costs associated with them as well. Having to pay for a well and pump in lump sum is difficult for many individuals. Installation of a well that cost \$5,000 will have a monthly cost of \$30 when amortized over 30 years at 6%. According to Progress Energy, it costs about \$5 per month for electricity to operate an average well pump. Further, a replacement pump, pressure tank, and switch would cost about \$1,000 or average about \$8 per month. That totals about \$43 per month, which is in the average cost range for water service. In addition, as of July 1, 2008, every county in North Carolina will be required to implement a new well construction and sampling program. Thus, all new wells must be permitted, inspected, and sampled. ***Benefit to Vance County Citizens:*** Having a water system will eliminate the need for up-front costs of wells and pumps and allow the homeowner to pay for water on a monthly basis. (There is an initial one-time tap fee of \$125 for the water system for those who elect to participate in advance.) It is unknown at this point exactly what the cost implications will be as a result of the implementation of the new well construction and sampling program, but it is expected to increase the cost somewhat.

Water Availability During Power Outages

Power Outages Usually Mean Loss of Well Water. Unless there is a generator with which to operate a well pump, power outages usually mean no water. Ice storms, hurricanes, blown transformers, traffic accidents, etc. have historically created challenges for homeowners with well pumps when electricity supplies have been lost. Extended power outages can often create serious concerns for those with small children, residents with health problems, etc. ***Benefit to Vance County Citizens:*** A rural water system will provide water even when there is a power outage in most situations. Overhead water storage tanks typically contain a one day supply and all pumping stations will be equipped with generators. This means a continuous supply of water during difficult and stressful times.

Improved Residential Development

Increased Use of Marginal Building Lots. In order to protect private wells, there are setback requirements in place. These requirements can often eliminate potential lots for building purposes, requiring additional acreage that is not available. Housing sub-divisions can maximize the use of available land, thus increasing residential development in the County. ***Benefit to Vance County Citizens:*** A rural water system will allow use of smaller building lots, make land more usable on individual lots, and encourage overall residential development. Residential development can add to the property tax base and spur the local economy.

Enhanced Economic Development

Improved Overall Development. Infrastructure is critical to economic development. The County water system is primarily designed to meet residential needs; however, it will also be generally available for use by small businesses, churches, schools, day care homes, etc. The availability of a stable water supply will certainly encourage development overall, including residential, commercial, business, institutional, or other. ***Benefit to Vance County Citizens:*** A rural water system will serve to enhance economic development in general, contributing to a more solid tax base and possibly creating more opportunities for employment.

Availability of Existing Wells for Other Uses and Needs

Wells Can Still Be Used. When a water system is constructed, homes which tap on must completely disconnect any private wells from the plumbing to prevent contamination of the central water system. An inspection will be necessary to ensure that there is no overlap of the two systems. However, these wells can then be available for other uses. ***Benefit to Vance County Citizens:*** Once disconnected from the same plumbing that will be used by the central water system, wells may be used to water livestock and pets, wash vehicles, irrigate lawns and gardens, and other similar activities which do not impact the water system. This can save the homeowner money.

Investment in Vance County's Future

Tomorrow's Needs. A rural water system is a critical investment in the future well-being of Vance County. The presence of adequate infrastructure is a vital ingredient for growth and prosperity for any community. While there is an unallocated available resource in Kerr Lake, the citizens of Vance County now have the opportunity to use their own water. Continued postponement of this important investment in the future of Vance County will only come with a higher cost. ***Benefit to Vance County Citizens:*** A brighter and more prosperous future.