Joe Urban

From: "Charles J Costello" <chanoew@peoplepc.com>

To: "Joe Urban" <urbanj@netsecuritypro.com>; "Anker Madsen" <amadsen@direcway.com>

Sent: Friday, November 11, 2005 11:42 AM Subject: Fw: Lancaster Comprehensive plan

Joe,

Please post to Website.

Anker, Please incorporate into future work on comp plan.

Thanks Charlie

---- Original Message -----

From: The Neiras

To: chanoew@peoplepc.com

Sent: Wednesday, November 09, 2005 23:56 **Subject:** Fw: Lancaster Comprehensive plan

Charlie:

Here are the suggested changes Lancaster residents of Saif Water feel should be included when revising the Lancaster Comprehensive Plan.

Lyn Neira

SAIF Water

Interfaith Service Council
P.O. Box 839, Burgess Virginia 22432
www.saifwater.org saif@crosslink.net 804 580-2079



November 9, 2005

TO: The Friends of Lancaster County

RE: Comprehensive Plan, Chapter 3
Protection of Potable Water Supply

The current Comprehensive Plan has an excellent description of our water supply as it was understood from 1978 reports, but research has been done since its adoption that dramatically changes the way we should view our drinking water resources.

The following are the major concerns which SAIF Water would like to see incorporated into the new Comprehensive Plan.

1. Artesian Aquifer Decline has now been documented by hydrogeologist Dr. Frank Fletcher. The artesian aquifers we now depend upon do not, as previously thought, have a source of surface recharge. Recharge from the ground water-table is also negligible. We must begin to secure the areas needed for reservoirs so that extensive development does not create massive problems and prohibitive costs.

Documentation such as the attached charts on aquifer decline and projected population growth should be included in the Comprehensive Plan so that the knowledge will be readily available.

- **2. Diverse Water Sources** should be explored. For example: James City County has been able to tap the Lower Potomac Aquifer (which is much deeper than the aquifers we now use) by installing a desalinization plant to treat the brackish water. Rain water harvesting technology is available in Virginia of a quality that could supply a hospital.
- **3.** Our shallow wells should be preserved and upgraded. They are an enormous source of good quality water. SAIF Water has developed methods for making our shallow wells capable of keeping water sanitary.

A 1995 survey done by SAIF Water in conjunction with Virginia Tech reveals excellent water quality in shallow wells in most areas of Lancaster County. However, the study also revealed a great need for homeowner education on maintaining wells so that they

will stay free from bacteria.

3. There should be great reluctance to abandon our shallow wells. Water samples are easily contaminated by inexperienced homeowners and even Health Department personnel. It requires extensive testing and evaluations by a water well technician to determine whether a shallow well can be kept in service. State agencies are currently condemning shallow wells on the basis of a single laboratory sample and failing to tell homeowners that they can get an exemption from Health Department permits which require abandonment of a shallow well.

Wells in our water-table (surficial) aquifer do not pose a threat to the artesian aquifers. Contaminated shallow wells are only a potential threat to nearby shallow wells and streams.

Shallow wells with bacterial problems can be upgraded and/or used with appropriate filtration equipment. They will be greatly needed in the future in addition to other sources of water supply.

5. **Precautions for shallow wells near agricultural areas**. It is generally recognized in literature of the U.S. Environmentnal Protection Agency and the U.S. Geological Survey, and by staff of our Virginia Health Department that agricultural operations can cause contamination of the groundwater with chemicals and fertilizers. Homeowners installing new wells should be advised to use artesian wells near our farms.

The County recognizes the right of farmers, under current state law, to land apply biosolids (sewage sludge). However, the county requests use of larger than minimum buffer zones near wells that draw from the water-table

aquifer and near streams that feed into the Chesapeake Bay. Further, the County requests that such buffer zones be determined by scientific methods for each site rather than guesstimates or routine application of standard procedures. For example, a hydrogeologist can map the one or two-year recharge area for the specific site showing the surrounding area where contaminants would take one year to reach the water source.

- **4. A Water Advisory Committee** is essential to deal with the many technical aspects of aquifer decline and water resource planning. Considering the fact that aquifer decline comes primarily from sources outside of the Northern Neck, there is also a sizeable political arena at the root of our problems which will require research and extensive networking. Our efforts should be coordinated with the Northern Neck Planning District. However, it is not prudent to think that other counties would help us develop reservoirs, etc.
- **5. The Groundwater Management District** designation extends into Middlesex County but does not include the Northern Neck. This designation by the Department of

Environmental Quality would require future large water users to obtain a permit from DEQ. Our conversations with DEQ staff indicate that they would welcome a direct request from the County.

- 6. **Conservation of water by institutions** should be required of new development such as golf courses and encouraged among existing users. Individual homeowners in the Northern Neck do not use enough water to make a significant dent in our problems.
- 7. Installation of **a monitoring well** in addition to the ones the Department of Environmental Quality supervises in Kilmarnock and Westmoreland State Park, should be actively pursued to increase the data base regarding artesian water for our area.

Rev. Gayl Fowler, President

Lancaster County members of SAIF Water

Lyn Neira Gordon Dudley
Art Neira Thomas Fauntleroy

Peggy Gaddy Ella Davis