

# Friends of the Powhatan Creek Watershed



September 2000

Volume 2 Issue 3

## The Powhatan Creek and JCC Comprehensive Plan 2002

This October, the James City County Planning Commission begins work on the 2002 Comprehensive Plan. David Jarman, Vice President of the Friends of the Powhatan Creek Watershed interviewed John Horne, Development Manager for James City County, about the process. Horne said that the Commission and Board of Supervisors will be meeting to agree on a methodology and timetable for the update of the 1997 Comprehensive Plan. In all likelihood, the process will officially kickoff in early 2001 and will continue throughout the year, with active public participation and technical analysis by county staff, and conclude with issuance of a final document by December 2001.

While the 2002 Comprehensive Plan will encompass all of James City County, not just the Powhatan Creek Watershed, the issues covered in the Plan do directly impact the watershed. Further, it should be noted that the watershed lies within the county's Primary Service Area (PSA), which defines those areas provided with public water and sewer and high levels of other public services. Moreover, this is where over 85% of the projected future development will take place in the next decade. As such, this is an opportunity for

the Friends membership and other private citizens to voice their concerns and interests to the Planning Commission about the impact of rapid population increases, and the consequent development, on the watershed environment.

**Population Projections:** The 1997 Comprehensive Plan provided population projections for James City County through

JCC Population:
1970 17,900
1975 19,300
1980 22,800
1985 28,700
1990 37,200
1995 41,900
2000 49,036
2005 57,359
2010 67,947

2010. The sidebar summarizes historical and projected population trends. Over the past 25 years the county has undergone significant changes in its population base. High rates of overall growth are attributed to net migration; these trends are expected to continue. The population composition is shifting to a higher proportion of older persons. In addition, the population is becoming less racially diverse, with the percentage of nonwhite population decreasing from 35% in 1970 to 20% in 1990.

**Watershed Environment:** The Powhatan Creek Watershed, and the county's overall natural environment, is one of the county's most valuable assets. In the 1997 Comprehensive Plan, it was noted

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## Projected Water Shortages Focus of September 20th Meeting

Learn about the implications of projected water shortages for development and environmental quality at a panel discussion entitled "Watershed Management for the Williamsburg Regional Area - The Supply/Demand Equation" on Wednesday, September 20 from 7:00 p.m. until 9:00 p.m. The program will be held in the auditorium at the James City Human Services Center, 5349 Old

Towne Road (off Longhill Road). It will focus on the current water problem affecting James City County specifically, and the Williamsburg regional area, generally. Dr. Gerald Johnson, Professor of Geology at the College of William & Mary; Larry Foster, general manager of the James City Service Authority; and Rich Costello, chair of the Citizens Water Conservation Committee, will comprise the panel.

## Get to Know Your Watershed—Part 2

In colonial days folks viewed swamps and marshes as nasty, odiferous wastelands. The idea that the only good swamp was a filled swamp persisted well into the 20th century. Nowadays, wetlands get better press because we understand that they are ecologically indispensable. Wetlands are built-in water-treatment and flood-control systems. Although we are working to mitigate the loss of wetlands in the watershed, knowing what to look for in our own back yards may help us to do more.

**How do I know if my land yard is a wetland?** Because most wetlands, especially bottomland forests, lack both standing water and waterlogged soils during at least part of the growing season, the answer to the question may be complex. The Army Corps of Engineers uses

three characteristics to make wetland determinations: vegetation, soil, and hydrology. If you are undertaking an activity in a wetland (such as placement of fill material, ditching, land clearing, and land leveling) a permit from the Corps may be required.

Use these indicators for your informal wetland evaluation: 1) Vegetation: Learn a few common plant types that grow here (e.g., bald cypress, cattails, cordgrass, willows, pickerel weed); 2) Soil: Is the area "mucky" when you dig? Does it smell like rotten eggs? 3) Water: Does it "squish" when you walk on it? Do you see small piles of debris indicating water movement? For help in making a wetlands determination for your yard, contact the Norfolk Core District Office at <http://www.nao.usace.mil/Regulatory/Rbwetlands>.

## Join us for Autumn Adventure—Oct. 14

On Saturday, October 14th a consortium of Williamsburg's environmental and conservation organizations will host *Autumn Adventure: A Conservation, Preservation and Recreation Day at Greensprings Trail*. This exciting daylong event will highlight the significant natural resources of Williamsburg/James City County against the backdrop of Greensprings Trail. It is also an opportunity to bring together those organizations in our community whose mission it is to protect, preserve and appreciate our natural assets. *Autumn Adventure* will take place from 10 a.m. to 3 p.m. at Jamestown High School (rain or shine).

Although *Autumn Adventure* is being held in conjunction with the statewide celebration, *Virginia Naturally 2000 – Linking Virginians to the Environment*, it is locally organized. The Colonial Soil and Water Conservation District, Friends of Powhatan Creek Watershed, JCC Parks and Recreation, JCC 4-H, and the Williamsburg Land Conservancy are sponsoring the event and encourage the public to attend. Over 25 environmental, conservation, and recreation organizations have been invited to participate by setting up displays about their efforts and conducting special activities. Examples include a fun, interactive "4-H Great Outdoors Center", guided walks identifying local flora and fauna along the trail and dem-

onstrations of water quality monitoring at the beaver pond.

JCC's Greensprings Trail circles a 100-acre beaver pond and conservation area behind Jamestown High School. Aided by the efforts of many volunteers, the Parks and Recreation Department began by clearing the way for five miles of trails and building boardwalks. As work has progressed, approval from the Army Corps of Engineers has been critical to ensure preservation of the conservation area's non-tidal wetlands. The Corps recently approved the master plan for Greensprings Trail and work will continue this fall to improve the trail surface. With input from the Colonial Soil and Water Conservation District, the Friends, Williamsburg-JCC Schools, and the Williamsburg Land Conservancy, Parks and Recreation will install a trail head information kiosk and interpretive signs. As a pilot project for the JCC Greenways plan, Greensprings Trail represents a significant beginning.

Keeping pace with rapid growth and development in the Williamsburg community calls for this area's numerous conservation and environmental organizations to join forces - working together to preserve significant natural, scenic and historic lands. Through community events such as *Autumn Adventure*, we are building critical partnerships and creating a collective voice on behalf of land conservation and environmental protection.

## Watershed Assessment Plan

James City County has contracted with the Center for Watershed Protection and the James River Association to develop a management plan for the Powhatan Creek watershed, to be completed by July 2001. If you are interested in receiving periodic mailings regarding the status of the plan, as well as notices of public meetings, please contact the James River Association at: P.O.Box 110, Richmond, VA 23218; 804-730-2898; or by e-mail at [jwessl@jamesriverassociation.org](mailto:jwessl@jamesriverassociation.org).

## Watershed Management Conf.

The 7th Annual Virginia Watershed Management Conference will be held in Williamsburg, November 29-December 1st. Designed to help organizations address watershed issues at the local level, the conference will include sessions on a wide variety of topics of interest to the Friends. The conference registration fee is \$75. For more information contact Wendy Mears 757/925-1524.

**JCC Comprehensive Plan** *(Continued from page 1)*

that, at the same time, it is one of the most vulnerable. The county continues to experience significant development pressures, mostly due to its location between two major metropolitan areas and its growing attraction as a tourist destination. This circumstance results in a number of important environmental concerns. These include: decreasing water supply and quality, soil erosion, stormwater runoff, loss of scenic vistas and historic sites, destruction of wildlife habitat, deforestation, air pollution, and loss of agricultural lands.

Several of these concerns are excerpted from the 1997 Comprehensive Plan:

1. **Water Quality:** The James River, and its related tributaries (including the Powhatan Creek) is rated by the Department of Soil and Water Conservation with an overall pollution rating of "high." It has improved in quality over the years, but it still faces serious challenges. It is threatened in terms of supporting aquatic life due to its high nutrient levels. Discharges from sewage treatment plants, industry and sewer overflows as well as runoff are direct contributors. Shellfishing is also threatened because of an increasing amount of non-productive beds.

2. **Public Drinking Water Supply:** James City County is serviced by two water systems: the James City Service Authority (JCSA) and Newport News Waterworks, which serves the Roberts District. Although the JCSA also provides public sewer connection, wastewater treatment is actually provided by the Hampton Roads Sanitation District (HRSD). An HRSD wastewater treatment plant is located in the lower part of the county on the James River. The JCSA is presently the largest water system in Virginia that depends solely on ground water. The water supply system consists of 40 wells and six major water storage tanks.

The 1997 Comprehensive Plan noted that the average daily water demand for the county was approximately 2.4 million gallons per day (mgd). At the time, it was stated that the existing water supply was capable of meeting demand. However, as population continued to grow, demand would reach the limit of ground water permit capacity within three-to-four years (i.e., 2000-to 2001). The original plan to meet this projected deficit was to utilize Ware Creek as a reservoir, but the Environmental Protection Agency (EPA), which wanted a regional solution to the impending water supply problem on the Peninsula, blocked this. As the regional solution, the King William Reservoir, would not be able to provide water before 2007, the JCSA contemplated other short-term steps. These included utilizing water from deeper aquifers and treating it to make the water suitable for potable consumption. Also, new wells were to be drilled to expand current withdrawal

capacity and to replace older wells no longer of adequate supply or quality (no consideration of construction of a desalination plant was contemplated in the 1997 Comprehensive Plan). In addition, the county planned to expand on a number of existing water conservation programs in place, such as meter replacement, leak detection, summer surcharges and stricter regulation.

3. **Loss of Scenic Vistas and Historic Sites:** There are opportunities for combining open space preservation and recreation areas. Examples of this include greenbelts, parks, bikeways and hiking trails along utility easements. The 1997 Comprehensive Plan discusses establishing a linear greenway or parkway or network of connecting trails, open spaces, natural, scenic, historic and recreation areas. In addition, building ordinances require specific amounts of open space for all types of new development.

4. **Destruction of Wildlife Habitat:** Urban development continues to pose a threat to important plant and animal habitats. James City County is host to a number of rare, threatened or endangered species and is an integral part of the valuable Chesapeake Bay watershed and ecosystem. In 1992, the Virginia Division of Natural Heritage completed work on the natural areas inventory of James City County, York County and the City of Williamsburg. Sixteen of the 25 most significant of these natural areas are within this county. The boundaries of these natural areas were determined by factors including species habitat, water quality protection and adjacent land buffers. During the development process requiring surveying, identifying, and mitigating adverse impacts of proven significance facilitate protection of these natural areas. Preservation of these areas can also be accomplished proactively through strategic purchases of these lands for an open space system. Open space systems would both protect these critical areas and create a continuous corridor for wildlife.

5. **Deforestation:** Approximately 50% of James City County is forested. Species composition is about two-thirds hardwood and one-third pine with a small amount of bald cypress. Forests contribute more than wildlife habitat and timber. Tree roots have proven to be the best device to hold streamside soil in place. Forested riparian buffers (those adjacent to water bodies) are particularly valuable for improving water quality and preserving biological diversity. These forested areas filter runoff before it enters the waterway, stabilize eroding areas, and provide wildlife habitats for many sensitive species. The 1997 Comprehensive Plan recommends strengthening tree preservation efforts, pursuing a Tree City USA designation through the state's urban forestry program and investigating the feasibility of a tree preservation ordinance.

## Keep in touch! Friends Board Contact Information

Forrest Fenstermaker, President Phone: 258-9647  
 Dave Jamman, Vice President  
 Boots Johnson, Water Quality Monitoring Coordinator  
 Ann Hewitt, Secretary

Don Johnson, Treasurer  
 Debbie Green, Grants and Publications  
 And Welcome to Tom Austin, our New At Large Board Member!

## Friends of the Powhatan Creek Watershed

210 Red Oak Landing Road  
Williamsburg, VA 23185



We're Expanding and Updating our  
Website! Watch for new URL

### What YOU can do for the Powhatan Creek Watershed:

- ~ Plan to attend our next meeting **WEDNESDAY, Sept. 20th 7 p.m.**, in the auditorium at the JCC Human Resources Building, Olde Towne Road
- ~ Participate in **Autumn Adventure, Saturday Oct. 14th, 10-3** at Jamestown High School.
- ~ Sign up to participate in Water Quality Monitoring of the Creek. Call Boots Johnson at 229-5279 OR e-mail: [drjohnson@whro.net](mailto:djohnson@whro.net).
- ~ Contact the James River Association to participate in the Watershed Assessment planning process (see article inside)
- ~ Attend the 7th Annual Virginia Watershed Management Conference Nov 29-Dec. 1st
- ~ Get a friend or neighbor to join the Friends!
- ~ Enjoy our Creek and its watershed!