

P. O. Box 410
Front Royal, Virginia
22630
Phone: (540) 636-4948
Fax: (540) 622-6073
<http://www.fosr.org>



Summer 2001

PRESIDENT'S MESSAGE

Strategic Planning Session

Steve Talley, Virginia Watershed Coordinator of the Canaan Valley Institute has been leading the FOSR Board in strategic planning. These sessions have helped us identify areas of concern and establish goals. Areas we are addressing at present include:

- getting quality water analysis data out on schedule;
- increasing membership recruitment;
- boosting membership involvement; and
- strengthening our organizational capabilities in fund raising.

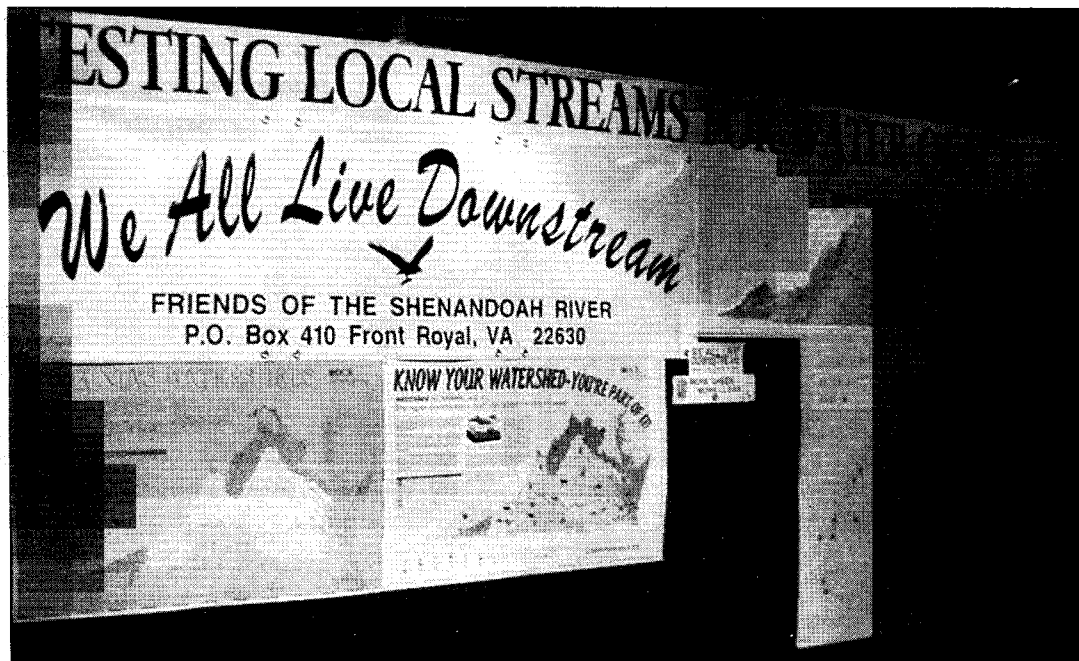
We are continuing to meet with Steve and will greatly welcome your ideas and involvement.

Annual Meeting

The 2002 Annual Meeting and Awards Dinner is scheduled for April 6, 2002 at the **Bowling Green North Country Club**. Mark this date on your calendar. You are welcome to suggest people you feel should be recognized by FOSR for their efforts to improve the quality and quantity of the waters in the Shenandoah River Watershed.

PAGE COUNTY FAIR, 2001

The Page County monitors for the Friends of the Shenandoah River (FOSR) set up and staffed a booth at the Fair again this year. The Page County Agricultural and Industrial Fair attracts between 25,000 and 30,000 people from all over the Shenandoah Valley, Northern Virginia and even Maryland. A large number of those attending the Fair walk through the commercial building where the Friends of the Shenandoah River have a booth that is approximately 15 feet long and 5 feet deep. Ten of our Eighteen Page County Monitors worked in shifts to staff the booth Monday through Saturday of Fair week. In addition to the FOSR exhibits, we have two large maps with our stream sampling locations marked that help us to explain our program of water testing to any one who will stop to talk. We also had color slides posted which explained each of the water quality tests that we perform and that explained what are the likely sources of each type of pollution. It was not possible to count all of our contacts, but we did encourage 7 new memberships during Fair week and convinced many others that they should take more interest in improving local water quality.



DOLLARS FOR PROTECTING THE SHENANDOAH RIVER WATERSHED

(by Bud Nagelvoort)

The Lord Fairfax Soil and Water Conservation District (LFSWCD) covering Warren, Shenandoah, Clarke and Frederick Counties and the City of Winchester has major responsibilities for the reduction of non-point source pollutants entering surface and ground water in the northern part of the Shenandoah Valley. Its governing board is made up of locally elected members who hold office for three-year terms.

Non-point source pollutants come from stormwater runoff from agricultural and urban lands reaching streams, rivers, ponds and lakes and from pollutants seeping into groundwater through leakage from sinkhole depressions and ponds. Those pollutants are usually in the form of sediments from eroding soils, nutrients such as nitrogen and phosphorus from farmland and lawn fertilization, and disease causing microorganisms such as fecal coliform, usually from livestock waste.

Because of long time recognition of the detrimental effects of non-point source pollution by the public, State and Federal Governments have established organizations such as local Soil and Water Conservation Districts, which, in cooperation with the Natural Resource Conservation Service and the Farm Service Agency, both Federal Agencies, administer programs to correct non-point pollution problems.

The LFSWCD, through the efforts of its Board members and two full-time technicians, has been able in the past several years to provide more than \$3 million in cost-share funds (usually 75% of construction costs) to landowners in the District for the installation of Best Management Practices on farmland as part of State of Virginia efforts to meet its obligations under the agreement among Maryland, Virginia, Pennsylvania and the District of Columbia to reduce pollutants entering the Chesapeake Bay.

Unfortunately, while progress has been made in the Bay clean up, much more needs to be done. At the same time, despite intense lobbying in the last session of the General Assembly, no new money was appropriated for this fiscal year for ~~regular cost-share programs.~~ The LFSWCD has some funds that were carried over from last year, to complete projects under way last year, but no new funds. The District is accepting applications for Best Management Practice projects, but only on the basis that they can proceed with regular cost-share assistance at some future date when funds may become available.

There remains one special program named Conservation Reserve Enhancement Program (CREP) available to landowners who are willing to set aside 35 to 100 feet of land along rivers, streams, ponds or wetlands as a forested buffer. Only cropland used to produce food or fiber or pastureland adjacent to those bodies of water are eligible. Sign-up for this program is open until December 31, 2002, or until 25,000 acres of land within the Chesapeake Bay watershed are enrolled (8,400 acres have been signed up in the first year of the program.)

CREP requires the planting of hardwoods in the buffer areas on 20-foot centers. It requires the fencing of those buffers to prevent the intrusion of livestock.

There are substantial financial benefits available to CREP participants on either a 10-year or 15 year basis.

Rental Payments: about \$80 per year per acre for either 10 or 15 years plus \$5 per acre when installation is complete.

Incentive Payments: A signing incentive payment of \$10 per acre for either 10 or 15 years and a 40% practice incentive payment based on the cost of the Best Management Practice installed.

Cost-share Payments: Up to 50% federal cost-share reimbursement for forested riparian buffers, filter strips, and wetland restorations. Virginia will pay up to 25% of eligible costs up to \$200 per acre of restored buffer or wetland. In our watershed an additional 25% cost-share reimbursement is available from the Chesapeake Bay Foundation and Ducks Unlimited for wetland restoration and qualified buffers with a minimum 100-foot width.

Optional Permanent Easement Payments: Virginia will pay \$500 per acre for recording a permanent easement to protect the CREP buffer in perpetuity.

The Friends of the Shenandoah River urges property owners to take action to prevent pollution of the river and the Chesapeake Bay. Application forms for cost-share \$ for programs on farm land can be acquired by calling 540 868 1130.

Best Management Practices Public Meeting (by Charles Vandervoort)

BMPs are developed by the various agencies in each state to provide guidelines on management of pollution from non-point sources. The BMPs cover a multitude of activities including but not limited to road construction, mining, marinas, septic systems, wild life, agriculture, logging, and forestry.

The Virginia Department of Forestry has recently revised their "Forestry Best Management Practices (BMPs) for Water Quality in Virginia" manual. The original manual has served the forestry community well since 1978, but the new manual adopts to new technology developed for logging and presents more efficient and technically correct ways to protect streams and wildlife. (This new manual - third edition - is available on the web at www.dof.state.va.us/wq/bmpguide.)

The FOSR organized a public meeting held on Tuesday, August 14 at the Warren County Office Building in Front Royal to hear Michael Lewis, Private Consulting Forester of Virginia Forest Watch speak on how the new BMP manual can do much to guide loggers to best preserve the quality of streams in the Shenandoah River Basin. The presentation was timely since turbidity of streams caused by bad logging practices is becoming a bit of a problem. A possible cause for this is the new technology developed for logging and that allows timber harvesting during rain when erosion is at its highest.

Mr. Lewis presented highlights of the VDF BMP manual, and illustrated these concepts with slide photographs taken in the field of many examples of good logging practices, but also some horrible examples

One of the biggest culprits is the poor construction of logging roads. Studies have shown that most stream sedimentation that occurs during and after timber harvesting operations is the result of improperly constructed or maintained haul roads, skid trails or landings. From these sites, sediment may enter watercourses if measures are not taken to prevent soils erosion. Another is the quick clear-cutting of large tracts of forest by unscrupulous loggers who do nothing to guard against erosion, and leave it up to society to pay for the clean up costs.

Although violation of BMPs by loggers is not a major problem, it is still significant. In guarding against non-point source pollution, the regulatory agencies are handicapped by the fact that the BMPs are guidelines, and are not a legal document. Thus, the agencies can not prosecute a logger simply because he builds a road that erodes during heavy rains. Rather, the agency must prove that the road is polluting a stream, and this where our FOSR monitors can assist.

The VDF does not have the resources to continuously patrol all logging operations. It needs the help from river monitors who, when they observe runoff of sediment into a stream coming from a logging tract (especially after heavy rainfall), can issue a complaint that the VDF can follow up on. We were assured that, in such a case, the VDF will take aggressive action within three days go after possible violators.

Condition of the Shenandoah River (by Charles Vandervoort)

The FOSR has completed the report on the Health of the Shenandoah River in Page County. This is the second report in the series. The first report on the Health of the Shenandoah River in Clarke County was finished earlier this year. Both reports will soon be available on the rejuvenated FOSR web page.

The general findings are that the portion of the South Fork of the Shenandoah River flowing through Page County contains rather high levels of nitrogen, and the concentration of phosphorus is even higher. The level of nitrogen exceeds the impaired level nearly half the time, and the concentration of P exceeds the impaired level almost all the time. The trend for N is increasing but that for P appears to be going down. The concentrations of NH₄, DO, pH, and T in the South Fork are all satisfactory, as is the level of fecal coliform.

For the many tributaries feeding into the South Fork the concentrations of N and P in the tributaries are also high, though not as high as the concentrations found in the South Fork. And, at times, many of the tributaries of the South Fork have very high fecal coliform counts. Swimming and boating in those tributaries during "high count" times is not recommended.

The quality of the discharge of the swage treatment plants feeding into the South Fork varies widely between plants. For example, the Pilgrim/Wampler Foods STP discharge has an nitrate-nitrogen concentration of 68 parts per million (PPM). This is considerably more than the 3 - 5 PPM of the Luray and Stanley STPs, and significantly raises the level of nitrogen in the South Fork. The concentration of ortho-phosphate for the Pilgrim/Wampler Foods STP is also much higher than that for Luray and Stanley. For the main Stem in Clarke County, the monitors and lab report that the level of nitrogen contamination in the Main Stem and some of the tributaries has risen markedly since publication of the Spring newsletter. For example, levels in the Main Stem more than doubled, while the level in Spout Run increased almost five-fold. The FOSR are trying to find an explanation for this phenomenon.

Current Flows:

The USGS stream flow data indicate that the flows in the South Fork at Front Royal at 397 million gallons per day is just above the median flow level of 313 mgd for this time of the year.

The flow in the North fork near Strasburg at 92 mgd is near the median flow of 97 mgd for this time of the year.

Recent flows for the Main Stem of the Shenandoah River were missing from the USGS tabulation. Visual inspection reveals, however, that the flow seems to be low but about average for this time of the year.

The level of water in the Stephens City reservoir seems very low. In fact, the south quarry seems to be empty. But according to the Frederick County Sanitation Authority, and as published in the August 18 edition of the Winchester Star, there is no cause for alarm. The Authority does hope, however, that this winter will provide relief in the ground water drought.

New Members

| | |
|----------------------------------|------|
| Rebecca Sirbaugh | 6/01 |
| Val VanMeter | 7/01 |
| Robert Sites | 7/01 |
| Michael & Denise Grutter | 7/01 |
| Robert Pownall | 8/01 |
| Virginia Newbury | 8/01 |
| Maston & Nanette Gray | 8/01 |
| David Hanlon, Fisher Diagnostics | 9/01 |
| Robin Lindner | 9/01 |
| Ardis & Robert Pruess | 9/01 |

Donations

A special thank you to Jody and Nelson Warfield for their generous donation of \$250.00

Introducing Our New Board Members

We would like to welcome Greg Baruffi and John Simperts to the FOSR Board of Directors.

Greg Baruffi has recently been appointed to the FOSR Board of Directors. However, Greg's first contact with FOSR was in 1996 when he was awarded the FOSR scholarship while attending Lord Fairfax Community College. As an Environmental Studies major at Shenandoah University, he was a frequent volunteer in the FOSR water-testing lab. Greg graduated in 1999. Along with FOSR, he is active in the Northern Shenandoah Valley Audubon Society.

John Simperts works as an aerial photography analyst for Environmental Research, Inc. in Linden Virginia. In addition to his environmental interests, John enjoys classical music, classic early Hollywood films, and mystery novels.

Welcome Back

We would also like to welcome back:

| | |
|------------------------------|-----------------------|
| Larry & Jean Beardmore | Nelson Minner, Sr. |
| Jay Cohen | Michael Ordower |
| FMC Corp | George & Ruth Ann Poe |
| Garden Club of Warren County | Bill & Debi Ramey |
| Harry Heard III, DDS | Linda Sinclair |
| Rice Matthews | Wilbur Smith |
| Hal J. Meredith | Patty Zack |

New Executive Board for 2001-2002

| | |
|---------------------------|---------------------|
| President: | Milton Boyce |
| Executive Vice President: | Fran Endicott |
| Executive Director: | Meryl Christiansen |
| Treasurer: | Charles Vandervoort |
| 1st Vice President: | Don Orr |

Web Page Development

The FOSR Board has organized an ad-hoc web page committee to rejuvenate and enhance the FOSR web page. The committee is composed of four eminently qualified individuals, two of whom are professional web page developers, and hopes to be able to have the improved web page ready well before the end of this year. Most of the development will be accomplished by FOSR volunteers.

A valuable addition to the new web page will a tabulation of current and historic data of water quality as collected by the FOSR since 1997. These data are designed to be easily retrievable by individuals interested in the health of the Shenandoah River.