SOON you won’t see water wagons, cistern pumps, or weatherbeaten outhouses in Weyers Cave. And it won’t be too long before good clear water from a new system will gush out of kitchen faucets throughout this north Shenandoah Valley community in historic Augusta County, Va. This county—once one of the largest in the Nation—originally extended all the way to the Mississippi River.

Things are looking better for Weyers Cave residents along with the residents of some 30,000 other rural communities that are now lacking modern water and sewage facilities.

This is because of the USDA Farmers Home Administration’s rural community facilities program under the Aiken-Poage bill, enacted in October 1965. Chances are now good that each year more than 1,400 communities with a total of about a million residents will for the first time begin benefiting from water and sewage disposal systems which millions of city residents have been taking for granted for years.

It is this program in action which is keeping Weyers Cave from joining the steadily growing list of dying towns. Soon, with a flip of the switch, excellent spring water from a centrally located supply will flow at a rate of over a million gallons a day. This will update the living conditions of some 500 Weyers Cave people more than anything that has happened since the railroad station opened in 1872.

In seconds after the switch has been flipped in this town that was looted and burned out during the Civil War, fresh, clean, sparkling water will rush out of the pump through chlorinating equipment and into a shiny new storage tank on a nearby hill.

From there it will flow by gravity to serve the community’s needs. This is indeed a great milestone for 120 farm and other rural families, for the businessmen, and for the students in the local elementary school.

Good running water will be available in almost unlimited supply for the first time since the town of Weyers Cave was founded in 1804. Add to this the unexpected bonus from having a brand new sewage system, and then it becomes evident why the Weyers Cave people are now filled to the brim with enthusiasm.

Gone forever is the need for residents to rely upon shallow wells subject to pollution from overflowing septic tanks. Gone also is the need for patching tar-streaked cisterns and the need to pump out aged septic tanks.

Things are truly different now. For the undertaker has been cheated out of burying another American town.

This came about through the untiring effort of...

Cecil W. Rose is a Civil Engineer, Association Loan Division, with the Farmers Home Administration.

Robert A. Holley, an Information Specialist with the Information Division, Farmers Home Administration, died in June of 1967.
work of some farsighted Weyers Cave civic leaders which had resulted in the approval of a USDA Farmers Home Administration grant and loan.

These funds made it possible for the borrowing Weyers Cave Sanitary District to take much needed action—action that would cross Weyers Cave off the list of some 30,000 communities which lacked modern water supply and sewage disposal facilities.

Dice's Spring—for many years this town's only source of water—is being enclosed and a pump installed. The other construction includes a 300,000-gallon storage standpipe and the laying of some 4 miles of 6- and 8-inch pipeline.

Building of the sewage disposal system will solve a longtime problem, one that halted construction of new homes and business buildings for many years.

Because of the area's impervious soil, septic tanks—the town's only waste disposal method—have been unsatisfactory. An estimated 80 percent of these septic tanks were not working properly at the time the Farmers Home Administration grant and loan were approved.

So it is no wonder the residents of a town that was at one time the valley's leading livestock and hay shipping center are thankful that during the past several years they had managed to keep its name on the map.

Although the Weyers Cave Sanitary District—a public body—was the official applicant for the grant and loan funds, five businessmen named to a Ruritan Club planning committee are credited along with the FHA county supervisor, Donald Spencer, with doing the needed organizational work which led up to the financing of the facilities.

This group, headed up by Chairman Loren Miller, paint manufacturing firm sales representative, started in earnest in September of 1964 to cure a stagnated town. The members were Cletus Houff, Houff's Transfer Corp. president; Harold Roller, local dairymen and Shenandoah Valley Milk Producer's Association executive secretary; Harry Driver, Weyers Cave Bank cashier; and George Schreckhise, Schreckhise Nursery manager.

Three years later, with the greatly needed community facilities all assured, three of these men—along with FHA County Supervisor Spencer and President Joe Shiflet from the spearheading Ruritan Club—expressed high optimism concerning the town's future.

"Financing construction of this water supply and sewage disposal system has really been a matter of life and death to the Weyers Cave community," explained Schreckhise. "The facilities were urgently needed. Residents could not get permits for sewage disposal, and without them there was no point in anybody planning to build a home in the community. This town is destined to expand two to three times its present size due to its good water and sewage systems."

**Needed for 30 Years**

Banker Driver emphasized that the community has been in need of these facilities for more than 30 years, with conditions becoming more acute as the population increased.

"Community expansion is now practicable. A new 3,000 student capacity Virginia State Industrial College is set for occupancy near Weyers Cave by September 1967," Driver said.

"This will mean that scores of new homes will have to be built for the teachers and others. The lack of water and sewage facilities has been the only factor holding back community growth."

Transfer Corp. President Houff said completion of this FHA-financed project will make it possible for employees of his and other firms to build homes close to their places of employment.

"Weyers Cave—located in the county's center and only 12 miles from the Staunton, Waynesboro, and Harrisonburg trading centers—may well soon be one of Augusta County's fastest growing communities," points out FHA County Supervisor Spencer. "An airport has been constructed near here. It and the proposed State industrial college will have a big impact on the area when in full-fledged operation."

Ruritan Club President Shiflet agreed that the community's growth can't do anything but soar in the light of present
prospects made possible by assurance of the new water and sewage disposal systems for this Virginia area.

Weyers Cave will soon not only be a more comfortable place to live, but a more beautiful one. Nurseryman Schreckhise reports that the availability of water will mean more landscaped yards and green lawns throughout the community.

It is too early to report the full impact of the two Farmers Home Administration-financed projects on this small Virginia town. But what happened in Tennessee's Warren County when adequate supplies of fresh water became readily available gives one a good idea of what the future holds for the farm and other rural residents in the Weyers Cave region.

When the Farmers Home Administration 3 years ago made $1.3 million in loans to five Warren County, Tenn., communities for financing construction of much needed modern water systems, things began to happen. Like spokes from the hub of a wheel, pure water systems now fan out from the McMinnville town water system in every direction.

These miles of waterlines provide a pure water supply to over 6,000 rural residents throughout the Irving College, Lower Collins, North Warren, Centertown, and Viola water utility districts.

Four Plants Built

That was only the start of the Warren County rural development success story.

Four industrial plants whose facilities cost around $550,000 to construct have located in the area since installation of the new systems. And they will soon be employing close to 400 area people.

Some 260 new homes costing over $3 million have been built in the area of the five Warren County communities. Another 390 houses have been remodeled at an expenditure of over $34,000.

Seventeen small businesses, including coin-operated laundries, a horse training stable, garages, service stations, nursery packing barns, and the like have started since the Farmers Home Administration-financed water system came into being.

---

HOW TO GO ABOUT IT

Here is how projects such as the ones at Weyers Cave, Va., and in Warren County, Tenn., come about:

Applications for financing a proposed water or sewage disposal system through the Farmers Home Administration can be made at any of the USDA agency's 1,600 offices by towns and villages with populations up to 5,500 people and by water districts or organizations operating on a nonprofit basis.

To be eligible a loan applicant must:

• Demonstrate that needed credit can't be obtained from other sources at reasonable rates and terms.

• Show that the water or sewer system will benefit rural people.

• Possess the legal capacity to borrow and repay the money, to pledge security for loans, and to operate the facilities or services which are to be installed with the loan funds.

Funds may be borrowed to install, to repair, or to expand rural water supply and waste disposal systems. This includes funds for reservoirs, pipelines, wells, pumping plants, and for filtration and treatment systems.

Funds also can be obtained to refinance debts, to pay engineers and attorneys, and for acquiring rights-of-way and easements.

A borrower's total indebtedness for such loans cannot go over $4 million. The maximum term for these loans is 40 years, and the interest rate cannot exceed 5 percent.

All of the loans must be secured in a manner which adequately protects the Government's interest. Bonds or notes pledging taxes, assessments, or revenues will be accepted as security if they meet statutory requirements.

A mortgage will also be taken out on the organization's facilities when State laws permit this.

In addition to loans, grants may be obtained, when necessary, to defray up to 50 percent of the construction cost.
A total of some 190 families in the five-community area have purchased around $31,500 in appliances, now that these communities have an adequate supply of running water for the first time.

New community buildings valued at over $500,000 have been built. This includes a church, a post office building, a wing on the school building, two recreational centers, and an addition to Irving College.

Other steps include the purchase of land for $500,000 by the State for a park at Rock Island and purchase of its first fire-truck by the town of Viola.

This all took place since the first of the five Farmers Home Administration-financed water systems started the water flowing to both farm and rural residents.

All of this worked to create new jobs and payrolls in the county. Then there are the untold benefits resulting from more adequate fire protection and the availability of fresh water for schools.

Indeed, the future is becoming much brighter as the years pass for the some 30,000 rural communities lacking modern water and sewage disposal facilities.

If you live in a waterless or sewerless community, you can obtain the details of how this program might be obtained by calling on the USDA Farmers Home Administration office which serves your county. There are more than 1,600 such offices serving every rural county in the States and in Puerto Rico.

Land Management for City Water

E. BRUCE JONES, RICHARD LEE, and JOHN C. FREY

WATER is steadily becoming more and more scarce around our cities. There the demand for large supplies of water is concentrated in small areas. The snow and the rain which fall in the urban area provide little usable water per person or per industry. Thus, many cities must look beyond their boundaries for clean water supplies.

Clean water is essential to life itself. Obvious as this fact may be, we are apt to forget just how much water we actually use. Each man, woman, and child in the United States uses, on the average, 44,000 gallons per year. It is estimated that the average water consumption per person will rise about 50 percent during the next 35 years.

Based on a daily requirement of 120 gallons, the average price that you pay for water is about 5 cents a day, or $18.25 per year. Because there is not enough available in all places to satisfy all the needs, water—like many other economic goods—has begun to command a price. And its price is determined, in the final analysis, by supply and demand.

Although there may be various sources from which a city may obtain its water

The authors are all from Pennsylvania State University and are associated with the Institute for Research on Land and Water Resources. E. Bruce Jones is Assistant Professor of Meteorology and Assistant Director of the Institute. As Assistant Director, he is in charge of the Water Resources Center.

Richard Lee is Assistant Professor of Forest Hydrology and is associated with the Institute.

John C. Frey is Professor of Land Economics and Director of the Institute.