

Weaverville, NC

Using Public Funding to Secure Water Supply

Jurisdiction: Weaverville, NC
Best Management Practice: Using Public Funding to Secure Water Supply
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Introduction: Source water protection is an ongoing process of protecting a community's source of drinking water. In areas where there are regional problems such as a polluted water source, it is rare that a single utility or town can solve the problem alone. Communities often have to make large financial commitments themselves, as well as searching for public funds to secure and clean up their water sources.

Description: Weaverville is located in western North Carolina, just north of Asheville in Buncombe County. This part of NC is growing relatively rapidly and the new interstate segment, I-26 adds to the growth pressure. At the same time, Madison County which borders Buncombe County is one of the poorest counties in the state. This area had many water quality problems including older rural housing with plumbing straight into the streams, poorly maintained septic systems, and the tradition of allowing livestock direct access to creeks – a problem for downstream water quality as well as erosion.

For the thriving community of Weaverville to solve its future water supply needs, it would have to find a way to handle the legacy of inadequate wastewater treatment in the upstream, rural communities, in particular high turbidity and coliform counts in the source water. In the late 1980's, Weaverville, and initially, its neighbors Woodfin and Mars Hill, began planning to meet the projected growth trends and the needs for expanded water service. These towns were interested in the Ivy River—a watershed north of Weaverville, nearly mid-way to Mars Hill and just across the county line. However, the Ivy River was not classified as a drinking water source.

As the three communities were planning for their water needs, the State of NC passed a Water Supply Protection Act, which included requirements to limit residential density, handle stormwater, maintain buffers for streams, and use best management practices for livestock. For the communities interested in the Ivy River as a drinking water source, this act posed some major political problems because it meant that one town's water supply, if located in another jurisdiction (as the Ivy River was, located in Madison County) would create limits to growth and impose restrictions on persons living near that water that weren't served by the water.

These problems coupled with further environmental regulations which required the Ivy River's pollution sources be identified and water quality standards be met, caused the project costs to increase for the three communities. Eventually, both Woodfin and Mars Hills withdrew from the project leaving Weaverville to face the political opposition, source water quality problems, and rising costs.

Weaverville pushed ahead to find funding and help with overcoming the regulatory barriers. In June of 1993, the citizens of Weaverville approved a 40 year general obligation bond of \$4.6 million to extend Weaverville's drinking water supply to the Ivy River. The NC DENR Public Water Supply Section issued an annual permit for the Weaverville drinking water source in the Ivy River, with an emphasis on protection of the watershed. In November, 1996, the bond was issued (only about 85% of it was actually needed) and Farmer's Home Administration – USDA (FHA-USDA) purchased all of the \$3.9 million general obligation bonds.

Meanwhile, additional project support was provided by: a \$1.5 million grant from FHA-USDA, a \$200,000 grant from the Appalachian Regional Commission, and \$100,000 in local Weaverville township funds.

In January 1995, environmental health regulators reported to the water quality regulators that they had identified two likely sources of waste runoff into the Ivy River: household sewage straight pipes and livestock watering and feeding areas near streams. NCDENR soon granted approval for the water intake provided that a program for the elimination of these unpermitted sources of fecal coliform contamination be established before plant startup.

In 1996, the North Carolina General Assembly voted to create a new program—the Wastewater Discharge Elimination program (WaDE)—to identify and eliminate straight pipes and failing septic systems in watersheds statewide. WaDE reported that many homes on the Ivy River relied on outhouses, and incomplete indoor facilities. With the help of the WaDE Program (administered by DENR) to manage the unpermitted sources of fecal coliform, many violations were corrected by October 2000. In November 1999, USDA set aside \$45,000 to finance corrective actions for residential wastewater elimination in the Ivy watershed. Meanwhile, the Mountain Housing Opportunity, Inc. nonprofit made \$60,000 available for housing rehabilitation.

In addition, the small Stumptown community in the watershed was identified as the source of numerous straight pipes; with funding from the North Carolina Clean Water Management Trust Fund (CWMTF) and matching town grants (which took nearly 5 years to negotiate), the Stumptown community was connected to the regional sewer collection and treatment system.

In 1998 Weaverville completed construction of the Ivy River Water Treatment Plant. The Weaverville water system is financed via two funds that are recovered primarily through user charges (water sales, tap fees, capacity depletion fees, reconnect fees, interest income, etc.). Water rate sales are based on meter size and corporate town limit location. Water rates for Weaverville residents are based on an increasing block structure and were raised by about 25% from 1992 to 2000 and by about 43% from 2000 to 2004.

Results: The water treatment plant is working well and in 2000 the utility served approximately 1125 customers in Weaverville and another 550 in the county along the water supply line from the Ivy River. Correspondence in the DENR files reports that the system was working well by March 1999 and the Weaverville drinking water plant was meeting all state and EPA standards. The plant also monitors stream conditions, giving the basis for future assessment of the upstream wastewater improvements. There is currently a general consensus by the parties involved that water quality in the Ivy watershed has noticeably improved.

Future issues for the region will include Weaverville's high water consumer rates relative to the rest of NC (based on a review of the 2002 North Carolina League of Municipalities Survey, Weaverville residential water cost more than water in 90% of NC). In addition, the continued growth along the I-26 corridor will put additional pressure on the region and its drinking water capacity limitations.

The Town of Weaverville could never have foreseen the obstacles in its path when it set out to find a new water source in the 1980s. Through persistence and creativity, it overcame those obstacles. However, without the outside help of funders, including the ARC, USDA Rural Utilities Service, the N.C. Clean Water Management Trust Fund, WaDE, and the Pigeon River Fund, along with the state legislature and many partners at the local and regional level that worked hard to address problems and calm fears, the community by itself could not have secured the water supply it now has.