



## Beaver Lake Watershed Update

**By Mike Malone, Executive Director  
Northwest Arkansas Council**

By identifying and promoting regional solutions to problems and challenges, the Northwest Arkansas Council has worked for nearly 20 years to make Northwest Arkansas a great place to live, work and raise families. The Northwest Arkansas Regional Airport, Highway 412, the Two-Ton Water District, the Northwest Arkansas Conservation Authority and Interstate 540 are just a few of the physical infrastructure projects on which the Council has worked during the past two decades.

Some have asked me why the Northwest Arkansas Council is working right now on Beaver Lake water quality issues. Because Beaver Lake — the single source of drinking water for one-in-eight Arkansans — is such a key component of

our regional infrastructure, the Council is committed to helping maintain Beaver Lake as a source of reliable, affordable and high quality water. At the same time, Beaver Lake is a recreational destination for tens of thousands each year and it is a "neighborhood lake" for thousands of property owners. The Northwest Arkansas Council wants to make sure we are working together as a region to maintain these many important — and vital — uses of Beaver Lake for future generations.

The Northwest Arkansas Council has hired TetraTech, a national environmental consulting firm, to help facilitate the development of a comprehensive watershed protection plan for Beaver Lake. With this project, we are trying to facilitate an inclusive, stakeholder-driven

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*Headwaters of the White River in Madison County near St. Paul in the Beaver Lake Watershed. In 1959, dam construction began on the White River to form Beaver Lake, which reached conservation pool level in 1966. (Photograph by Amy Wilson.)*

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process through which interested parties will have a say in how we maintain the various important uses of Beaver Lake.

The watershed protection approach is designed to build an understanding of what the problems are in a specific drainage area, so that cooperative solutions can be implemented. The approach is based on sound science, good engineering, appropriate technology, stakeholder involvement, communication, and cooperative action. In practice, the watershed approach involves the following basic steps:

- Building partnerships to identify issues, indicators, and conduct outreach,
- Characterizing the watershed through data gathering and analysis,
- Finalizing goals and identifying solutions,
- Designing an implementation program for the selected protection practices,
- Implementing the watershed protection plan with ongoing monitoring and education, and
- Measuring progress and making adjustments, as indicated by the monitoring results.

The watershed protection strategy

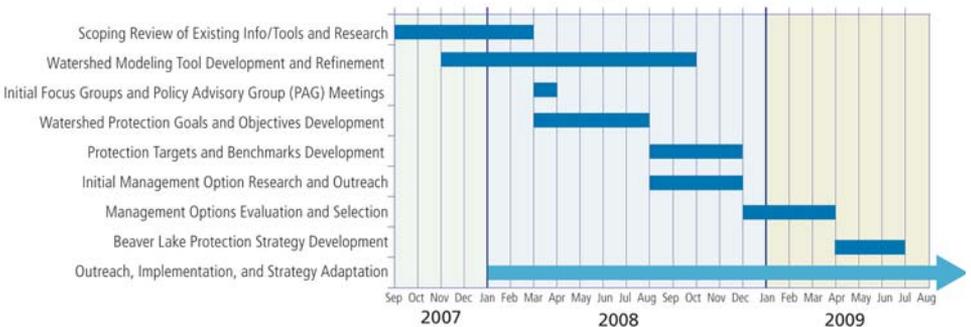
seeks to refine stakeholders' understanding of the causes and sources of water pollution so that a carefully targeted menu of improved protection practices can be developed and implemented. Since many of the water quality problems are complex and involve various sources, we will only be able to implement the identified strategies if they are developed through a process that involves stakeholder communication, coordinated support, and cooperative decision-making.

We are now roughly halfway through the initial watershed protection planning process. TetraTech staff has met with a wide variety of stakeholder focus groups, including those representing property rights interests, livestock and poultry producers, poultry integrators, developers, drinking water utilities, environmental and conservation groups, recreational interests, and local governments. In these meetings, we heard some common themes regarding the water quality problems of Beaver Lake and its tributaries. In particular, the focus groups supported enforcement of existing regulations, incentives, fostering a stewardship ethic, and outreach and education in implementing the management practices needed to protect water quality.

Working committees of the water-

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Beaver Lake Protection Strategy Timeline



Graphic courtesy of Tetra Tech

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shed planning project include a Beaver Lake Policy Advisory Group (PAG) and a Technical Advisory Group (TAG). The PAG represents a wide variety of stakeholder groups from the public and private sectors and serves as a sounding board for watershed characterization results and possible solutions to key water quality impairments and threats. Since the PAG was organized six months ago, the group has reviewed water quality data summaries for the lake and its tributaries, information on land uses — such as for farming, development, forest, and so on — and land management practices, including crop fertilization practices, development patterns, unpaved road maintenance, septic system operation, and other practices. Initial PAG meetings used the focus group input to refine a set of objectives for the watershed plan. They have established the following goals and objectives:

### Overarching Goals

- Maintain a long-term, high-quality drinking water supply to meet present needs and continuing growth of the region.
- Restore water quality of impaired stream and lake areas (as listed on the Arkansas Department of Environmental Quality's list of impaired waters).
- Minimize additional costs and regulations for people living and working in the watershed.

### Management Objectives for Beaver Lake

- Minimize risks to public health and safety.
- Minimize taste, odor, and color problems in the public drinking water supplies.
- Minimize impact on water supply

intakes and treatment operations.

- Meet long-term needs for water supply in the region.
- Maintain recreation enjoyment and ensure that recreation reflects environmentally sound stewardship of the lake.
- Restore water quality in impaired areas to meet water quality standards.
- Provide an economically priced water supply.

### Management Objectives for Impaired Streams

- Restore water quality of impaired streams and rivers to meet water quality standards.

### Management Objectives for Unimpaired Streams

- Provide general recommendations to protect and maintain water quality in unimpaired waters to address potential hydrology and water quality impacts.

PAG members are beginning to consider a number of management practice options that address water quality impairments and threats. These practices target specific pollution causes and sources. The PAG is also examining the impacts of wastewater treatment and effluent discharges into the White River and War Eagle Creek to determine whether or not improvements to those facilities can improve downstream water quality. Over the coming months the PAG will begin selecting the most promising and achievable management practices to include in the watershed protection strategy and start identifying and engaging those individuals and resources needed for implementation.

The Technical Advisory Group (TAG)

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has met twice to review scoping information and provide input on the most important issues related to the watershed protection strategy. TetraTech is working with the TAG to refine and apply a watershed modeling tool developed by University of Arkansas researchers. Current plans call for using the completed model to develop a baseline summary that shows current and future predicted pollutant loading comparisons for selected indicators. Those predicted pollutant loads will then be applied to a lake response model developed by the United States Geological Survey in

Arkansas. The lake response model will be used to evaluate indicator targets and benchmarks with respect to the planning goals and objectives.

The Northwest Arkansas Council is very pleased to be involved in this important project. And, we look forward to working with all the stakeholders through the planning process and into implementation. If we work cooperatively, together we can maintain this vital component of Northwest Arkansas' infrastructure for future generations.

## David Short, Woody Bassett elected to Board



*David Short*



*Woody Bassett*

Beaver Water District is the oldest regional water district in the state of Arkansas. The District formed under Arkansas Act 114 of 1957 in order to manage the treatment and distribution of drinking water from Beaver Lake.

As a non-profit, quasi-public entity, the District is governed by a six-member elected board of directors, with three members from Washington County and three from Benton County. Board members serve six-year terms, which are staggered by two years in each county. That means every two years, when elections are held for public office, there's one board seat up for election in both Washington and Benton counties.

On Nov. 4, David Short of Bentonville (Benton County) and Woody Bassett of Fayetteville (Washington County) were

each elected by voters to serve six-year terms on the board.

Mr. Short, who currently serves as President of the Beaver Water District Board of Directors, began serving on the District board when he was appointed in 2002 to fill the unexpired term of the late Ernest Lawrence. Mr. Short is President and CEO of Arvest Bank in Bentonville. His banking career has taken him to Bartlesville, Okla., where he served as a board member and fund drive chairman for the United Way, as well as the Public Library Trust Authority; to Siloam Springs where he was a board member of the Child Development Center; and to Bentonville, where he has been president of the Bentonville Public Schools Foundation.

Mr. Bassett began his service with the District's board when he was appointed in 2007 to fill the unexpired term of Curtis Shipley, who resigned. Mr. Bassett, a native of Fayetteville, has practiced law for 30 years and is a partner in the Bassett Law Firm LLP. He attended the University of Arkansas and graduated from the Arkansas Law School in 1977. He served as a Special Associate Justice of the Arkansas Supreme Court on a case in 1996, and he received the outstanding lawyer award from the Arkansas Bar Association in 2003.

## Board reviews District operations, tours facilities



*Mindi Crosswhite, Laboratory Supervisor, explains a laboratory procedure to board members Bill Watkins (center) and Chris Weiser.*



*Bill HagenBurger (third from left), Plant Engineer, took board members and District managers on a tour of the Steele Plant. Pictured here are (from left) David Short, Bill Watkins, Herb Hawkins, Chris Weiser, CEO Alan Fortenberry, Woody Bassett, and attorney Colene Gaston.*

The Beaver Water District Board of Directors oversees an annual budget in excess of \$20 million. During monthly meetings, board members review operations, conduct business, and receive technical updates and information. This includes monitoring the production and sales of water to the District's four customers, as well as creating policy and guiding the growth of the organization through various stages of expansion costing millions of dollars. Recent board presentations have included:

- Overview and tour of laboratory equipment and capabilities
- Tour of the renovated Steele plant
- Summary of regulations impacting the water industry
- State of the Lake report (water levels, water usage, turbidity values, etc.)
- Overview of Disinfection By-Products
- Water Quality Testing (what we test for and why)
- Safe Drinking Water Act (history and purpose)
- Customer Cities' Distribution Systems
- Summary of the District's Annual Water Quality Report
- History and formation of the District

# Construction Update:

## Keeping Pace with Regional Water Needs



For more than 40 years, Beaver Water District's Steele Water Treatment Plant (WTP) did a yeoman's job of treating and producing drinking water for Northwest Arkansas. The plant, which began its life as a 10 million gallon a day conventional drinking water treatment facility, grew to 40 MGD as the years passed and demand for water in the region grew. But it was only a matter of time before the facility would have to be demolished and replaced or renovated.

Improvements to the Joe M. Steele Water Treatment Plant, at \$26.1 million, began in April 2007. The construction is now complete and the plant is in the process of start up. This puts an additional 40 million gallons a day treatment capacity on line and brings Beaver Water District's total treatment capacity to 140 MGD, enough to meet projected drinking water needs until the year 2020. The contractor is Crossland Heavy Contractors.

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## Kayla Mhoon joins District



Kayla Mhoon of Fayetteville joined Beaver Water District on October 27 as Executive Assistant. Her duties include providing administrative and secretarial support to the District's Chief

Executive Officer, Alan D. Fortenberry, and the Chief Operating Officer, Larry L. Lloyd, as well as coordinating Beaver Water District's Board meetings.

Prior to joining the District, Mhoon worked as Executive Assistant to the

Chairman and CEO of Gaddy Investment Company for six years. She also worked as Administrative Assistant to the Chairman and CEO and Assistant Corporate Secretary of the Leggett & Platt Aluminum Group, a division of Leggett & Platt, Incorporated, a publicly traded company, for nine years, as well as Vice President of Items Processing at First National Bank, Fayetteville, for three years, and Administrative Assistant to the President and Corporate Secretary of First National Bank for five years.

# Chamber Awards Bassett, Cheevers & Names Brooks Chair



*Woody Bassett (center), a member of Beaver Water District's Board of Directors, received the Wes Gordon Golden Deeds Award during the Fayetteville Chamber of Commerce's Annual Meeting held Nov. 10. He is pictured here with Nancy Gordon Allen and her husband, Nate Allen. Mrs. Allen is the daughter of the late Wes Gordon.*

Fayetteville Attorney Woody Bassett, who was elected to the Beaver Water District Board of Directors on Nov. 2, received the Wes Gordon Golden Deeds Award from the Fayetteville Chamber of Commerce during the Chamber's annual meeting held Nov. 10th. The Wes Gordon Golden Deeds Award was formed from the desire of Nancy Allen to honor and support her father, Wes Gordon, who was the Fayetteville Chamber President/CEO from 1947-1972. A Wes Gordon "Golden Deed" nominee is someone who has gone above and beyond to make Fayetteville a better place to work and live. A rail, bordering the gardens, on the Fayetteville Downtown Square, was constructed to honor the award recipients. Past recipients include the late John Lewis, Clark

McClinton, Jesse Bryant, Harry Vandergriff, Frank Broyles and Fred Vorsanger.

Stacy and Joyce Cheevers received the Washington County Agricultural Leader's Award from the Chamber. Mr. Cheevers is Plant Manager for Beaver Water District, where he has been employed for 18 years. This past summer, in recognition of outstanding farming practices, the Cheevers also received the honor of being selected Washington County's 2008 Farm Family of the Year.

Additionally, Mary Beth Brooks, a member of the Beaver Water District Board of Directors and president and CEO of the Bank of Fayetteville, was named chairman of the Fayetteville Chamber of Commerce during the annual meeting.

# Just the Facts

Beaver Water District provides safe, clean water to approximately 250,000 people, more than 9 percent of Arkansas' population.

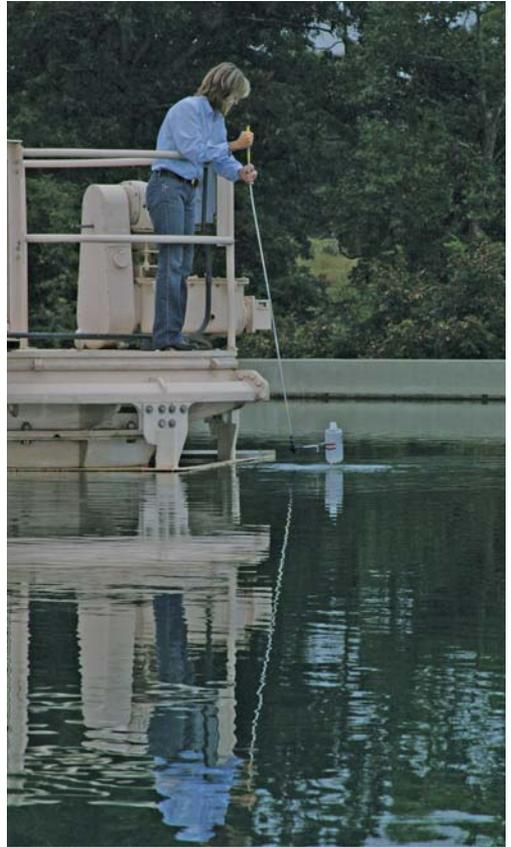
Beaver Water District sells water wholesale to four customers — Fayetteville, Springdale, Rogers, and Bentonville — at \$1.18 per 1,000 gallons.

Approximately one-third of the average residential water bill for households served by one of the District's customer cities is for the cost of water from the District. The other two-thirds of the bill is for local utility specific costs such as distribution lines, storage tanks, metering, and system maintenance.

The average per person water consumption in Benton and Washington counties is 169 gallons/day. The figure is high due to the large concentration of food processing facilities in the service area.

It takes 15 hours for one gallon of water from Beaver Lake to be treated and ready for use.

Water samples are tested numerous times each day to ensure consistent drinking water quality, and water is automatically sampled continuously for adequate disinfection and clarity.



*Photograph courtesy of Randy Paris.*

## BWD BOARD OF DIRECTORS

David A. Short, President

W. Herb Hawkins

Bill Watkins, Vice President

Mary Beth Brooks

Chris Weiser, Secretary-Treasurer

Woody Bassett

## HOW TO REACH US

Amy Wilson, Director of Public Affairs

[awilson@bwdh2o.org](mailto:awilson@bwdh2o.org) - [www.bwdh2o.org](http://www.bwdh2o.org) - 479-756-3651