The quality of the water flowing through northeastern Oklahomaâ€™s Illinois River has been a matter of concern and controversy for more than 25 years. At least as far back as 1988, when Oklahoma sued to stop Fayetteville, Arkansas, from discharging treated wastewater into a tributary of the Illinois, environmentalists, tourism interests and the state of Oklahoma have fought what often seemed a losing battle to return the river to its near-pristine condition when designated a National Scenic River in 1970. Recently, the news has been a little better. In September, the Oklahoma Water Resources Board reported that phosphorous levels in the river and its tributaries on this side of the Arkansas state line are continuing to decline. â€œMost of the trend lines are down,â€• said the OWRBâ€™s Derek Smithee, who has been tracking water quality in the Illinois watershed since the 1990s. â€œWeâ€™re encouraged. Weâ€™re not home, but the problem didnâ€™t come about overnight.â€• Another potentially important step occurred on Oct. 1, when the U.S. Environmental Protection Agency finally published for comment the Illinois River Watershed Basin water quality model. Agreeing on this model is a prerequisite for developing water quality controls and standards for the Illinois. â€œI would expect over the next several months weâ€™ll work with Arkansas and the EPA to critically evaluate that to make sure the model is right and correct and technically accurate,â€• said Smithee, who is head of the OWRBâ€™s water quality programs. â€œThen weâ€™ll all sit down and figure out if more (phosphorous) is going in than those water bodies can assimilate, what are we going to do.â€• Phosphorous is perhaps the most dangerous and pervasive of the pollutants affecting the Illinois. Phosphorous and other nutrients encourage algae growth, which in turn degrades water quality and reduces dissolved oxygen needed by fish and other life forms. Smithee said that while the trends are headed in the right direction, the Illinois River and its tributary Flint Creek have yet to meet targets set 15 years ago. Those targets are based on a 1996 report that found nutrient-fed algae was endangering Lake Tenkiller on the lower Illinois River. That report said phosphorous had to be reduced 40 percent to

keep water quality from deteriorating further, and up to 80 percent to return it to its original state. In 2000, Smithee convinced Arkansas to work toward achieving the 40 percent reduction. Initially, most environmental concerns involved wastewater from northwest Arkansas. By the early 2000s, however, the focus had shifted to agricultural waste, and in particular litter from large-scale poultry operations. Oklahoma and Arkansas agreed to work on the problem together in 2003, but in 2005 Oklahoma Attorney General Drew Edmondson sued 14 poultry producers, saying they were not serious about controlling nutrients. The trial before U.S. District Judge Gregory Frizzell ended in February 2010, but Frizzell has never issued a decision in the case. In February 2013, Oklahomaâ€™s new attorney general, Scott Pruitt, announced an agreement with Arkansas on a three-year study. Smithee said improvements in wastewater treatment and the poultry industryâ€™s decision to haul away more litter instead of spreading it as fertilizer are chiefly responsible for the recent decreases in phosphorous readings. But that might not be enough, he said. â€œThe more reductions that are required, the more difficult it is to achieve them,â€• Smithee said. â€œThe first half is fairly easy. The next 25 percent is a little harder. The last 25 percent gets really hard. â€œWeâ€™ve pretty much achieved the first half. Now weâ€™re in that next 25 percent you can actually achieve if you work hard enough. And then the question will be will we achieve it ... in the next five or 10 years, or will it be the next 150 years.â€• Randy Krehbiel 918-581-8365 randy.krehbiel@tulsaworld.com Get local news delivered to your inbox! Subscribe to our Daily Headlines newsletter. Sign up! * I understand and agree that registration on or use of this site constitutes agreement to its user agreement and privacy policy.