IRW Project

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Meeting with Arkansas Mayors
Thursday, October 3, 2013
Room 320 Senate Hart Office Building
Re: TMDL and Stormwater Issues

Meeting Purpose: To discuss continued improvements in the Illinois River watershed under the First and Second Statements of Joint Principles and Actions between Arkansas and Oklahoma. The meeting was requested by Senator John Boozman on behalf of the mayors. Senator Boozman may join the meeting.

Mayors: Lioneld Jordan (Fayetteville); Doug Sprouse (Springdale); Greg Hines (Rogers); Bob McCaslin (Bentonville); John Mark Turner (Siloam Springs)
Congressional Staff: Philip B. Moore, Office of Senator Boozman

EPA Participants:
Mark Rupp, Deputy Associate Administrator for Intergovernmental Relations (OCIR) / Arnita
Tom Wall, Acting Division Director, Assessment and Watershed Protection Division, Office of Wetlands, Oceans and Watersheds (OWOW)
Deborah Nagle, Director, Water Permits Division, Office of Water (OW) Kevin Weiss
William K. Honker, Director, Region 6 Water Quality Protection Division
David F. Garcia, Deputy Director, Region 6 Water Quality Protection Division
Claudia V. Hosch, Associate Director, NPDES Permits and TMDLs Branch
Richard A. Wooster, Chief, Region 6 TMDL Section
Brent Larsen, Chief, Region 6 Permits and Technical Section
Paul Kaspar, Chief, Region 6 Permits Oversight Section
Quang Nguyen, Environmental Engineer, Region 6 TMDL Section
Carmen Assunto, State and Local Government Liaison
LaWanda Thomas, Region 6 Congressional Liaison
Greg Sprau

Various refs, p. 2 + p. 5

Background:

REGION 6 EXECUTIVE SUMMARY

TOPIC: Illinois River Watershed Multijurisdictional Nutrient TMDLs Development Project

BACKGROUND: For several decades, issues associated with excessive algae in Illinois River Watershed in northwest Arkansas and northeast Oklahoma and in Oklahoma's Lake Tenkiller have been highly contentious. These issues highlight the divergent interests and concerns of municipalities and industries (e.g., agriculture/poultry), as well as the significance of downstream water quality standards to upstream pollutant sources in other jurisdictions. In its landmark 1992 decision, EPA had the authority to require an upstream Arkansas sewage treatment plant discharging into the Illinois River to comply with NPDES permit limits stringent enough to protect Oklahoma's downstream water quality standards.

In 2002, Oklahoma established a 0.037 mg/l phosphorus criterion for its portion of the Illinois River, as well as the States' other designated "scenic rivers." Subsequently, Oklahoma and

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Arkansas entered into an agreement which stipulated NPDES permit limits of 1.0 mg/l of phosphorus for certain major dischargers in the watershed. The terms of said agreement expired in June 2012. The EPA notes that Arkansas and Oklahoma have allowed permits to be administratively continued with existing permit limits.

On February 20, 2013, Oklahoma and Arkansas entered a new agreement providing for an Arkansas funded Stressor-Response Study for the Illinois River. The primary purpose of the Joint Study is to determine the total phosphorus threshold response level. Both States plan to complete the Study in three years, and a recently established committee consisting of six representatives appointed by Governors of Oklahoma and Arkansas will manage the Joint Study. The EPA Region 6 has recently received letters from the Arkansas Congressional Delegation, Tyson Foods, Inc., the Poultry Federation, Agricultural Retailers Association, Simmons Foods, and others asking the Regional Administrator to place the Illinois River Modeling and TMDL Development Project on hold while the Stressor-Response Study is conducted. In response, the EPA Region 6 believes that the current work is vital to the shared goal of improved water quality in the Illinois River and its upstream tributaries in northwest Arkansas and plans to continue its current modeling efforts in the Illinois River Basin. In the event that the prospective stressor-response study is completed and yields an alternative EPA-approved phosphorus criterion, Region 6 will replace the current Oklahoma Scenic Rivers criterion (0.037 mg/l phosphorus) with the new value and then reassess the results of modeled load reduction scenarios to meet the revised WQS, if any.

CURRENT STATUS: Since November 2009, EPA continues to focus its efforts on completion of the Illinois River Watershed model which would underpin any TMDL(s), regardless of whether one or both States would develop the TMDL(s); or, one or both States request that EPA establish the TMDL(s).
The EPA Region 6 has been working with both States, effected tribes, and other interested parties to develop a comprehensive model of the Illinois River Watershed. Specifically, Region 6 has recently established a workgroup consisting of Arkansas, Oklahoma, Cherokee Nation representatives to design the phosphorus load reduction model scenarios to meet water quality goals in both states including the downstream Oklahoma criterion of 0.037 mg/l phosphorus. In addition, the EPA Region 6 has committed an additional $ 360,000 to the project and entered into an agreement with the National OWOW Technical Support contractor Michael Baker Jr., Inc. on September 12, 2013, to finish the Illinois River Watershed modeling and TMDLs development effort. The Region anticipates to complete the modeling exercise by late Fall 2014.

The EPA Region 6 believes that the keys to success for this critical project include maximizing the transparency of our work to interested stakeholders, and ensuring that we rely upon the best available science in every aspect of the model involvement. The Region, to date, has engaged numerous agencies in Arkansas and Oklahoma, in addition to interested Tribes (i.e., Cherokee Nation, United Keetoowah Band) and other public stakeholders. The Region has provided several avenues for stakeholders to provide input to the project, and many interested parties have provided feedback to the Region on interim technical products through the State environmental agencies. The Region has also prioritized regular conference calls with States and Tribal Agencies, and quarterly public information meetings in the watershed to provide project updates. The Region will hold the next public meeting in West Siloam Springs, Arkansas on November

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14. 2013. Cherokee Nation is volunteering and working with EPA to host the next public meeting in the watershed.

ENVIRONMENTAL/PUBLIC HEALTH CONCERNS: Nuisance algae in Illinois River Watershed streams and eutrophication of Lake Tenkiller brought about by excessive phosphorus.

REGULATORY/LEGAL ISSUES: As the permits for several major municipal dischargers in northeast Oklahoma and northwest Arkansas expire, a comprehensive strategy is needed to address nutrient impairments in the watershed in both States.

COMMUNITY CONCERNS: Municipalities are concerned about future, more restrictive NPDES permit limits for phosphorus, and the cost associated with meeting them. Non-point sources of phosphorus and other nutrients, especially the agricultural interests within the watershed, are also concerned that EPA's study and possible TMDLs may eventually result in the imposition of costly regulatory controls on their operations.

REGION 6 EXECUTIVE SUMMARY

TOPIC: Status of EPA Actions on Arkansas's Clean Water Act § 303(d) Lists of Impaired Waters

Deliberative, Pre-decisional

BACKGROUND: Arkansas DEQ submitted their 2010 and 2012 § 303(d) Lists of impaired waters on April 1, 2010 and March 30, 2012. ADEQ did not evaluate all readily available data and omitted waters for other reasons, leading EPA staff to recommend adding 295 and 280 waterbody-pollutant pairs to the 2010 and 2012 § 303(d) Lists, respectively. The proposed additions include phosphorus listings for Osage Creek, Spring Creek and Town Branch. EPA's action is pending.

EPA has worked with ADEQ on a "2014 Game Plan" to work collaboratively to resolve remaining assessment methods issues in an effort to get an approvable list in 2014.

CURRENT STATUS: Awaiting green light to propose actions on the 2010 and 2012 § 303(d) Lists and initiate public review; Staff are currently finalizing a formal letter regarding concerns about ADEQ's draft 2014 assessment methods.

ENVIRONMENTAL/PUBLIC HEALTH CONCERNS:

- The State of Oklahoma remains concerned about ongoing eutrophication of interstate waters
- Embedded and/or suspended sediment, which may also carry adverse contaminants, are becoming a major concern in the state due to construction and O&G activities
- Environmental group interest of GP Crossett discharge into Coffee Creek and Mossy Lake

TECHNICAL CONCERNS:

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- ADEQ did not identify all waters that meet federal listing requirements, including Osage Creek, Spring Creek and Town Branch

REGULATORY/LEGAL REQUIREMENTS (40 CFR 130.7):

- Assessment methods are a required part of the documentation supporting the § 303(d) Lists
- States must evaluate *all* readily available information and identify pollutants causing or expected to cause violations of all applicable standards, including numeric and narrative criteria, waterbody uses, and antidegradation
- EPA must approve the § 303(d) List or disapprove and identify waters & pollutants to be included
- States must establish TMDLs for all listed pollutants and incorporate them into management plans

REGION 6 EXECUTIVE SUMMARY

TOPIC: **EPA Actions on Arkansas 2010 and 2012 Clean Water Act § 303(d) Lists of Impaired Waters**

Deliberative, Pre-decisional

DATE: February 20, 2013

PURPOSE: Briefing for Bob Perciasepe, Acting Administrator

BACKGROUND: Region 6 has been working with the Arkansas Department of Environmental Quality (ADEQ) to rectify a long-standing issue of underassessment of impaired water bodies. Although the state has relatively stringent water quality standards in many respects, the state has listed only about 5% of their flowing waters as impaired; six adjacent states report on average about 10% of flowing waters as impaired. In 2002, EPA Region 6 reviewed a list of Arkansas waters as directed by court documents stemming from *Sierra Club v. Clifford* (1999), including Osage and Spring Creeks. EPA identified many omissions from Arkansas's lists that were attributable to data management errors, failure to evaluate all readily available data, and inconsistent application of water quality standards. Region 6 has found that the state consistently under-reports impairments and has added 52, 87, 79, and 26 waterbody-pollutant pairs to Arkansas's 2002, 2004, 2006, and 2008 § 303(d) lists respectively. These impaired-but-unlisted waters are not being addressed by TMDLs, appropriate permitting limits, and nonpoint source funding efforts (CWA 319 and USDA), allowing water quality to worsen rather than improve. Region 6 has also advised the state on sampling and laboratory issues that have resulted in the state's listing of waters that are likely not impaired.

Region 6 has worked with the state to improve data analysis capabilities over the last decade. Regional staff developed a program to help Arkansas automate comparison of stream standards to monitoring data, which the state used for the 2004 through 2008 listing cycles. The state did not use an automated process to evaluate state-wide information in 2010 and 2012, which likely contributed to increased quality issues with the lists pending EPA action. ADEQ submitted 2010

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and 2012 § 303(d) lists of impaired waters on April 1, 2010 and March 30. 2012, respectively. Region 6 worked extensively with ADEQ, OW and OGC staff to develop a partial approval and proposed disapproval action, which is summarized on the attached table.

NOTABLE ISSUES:

Since 2002, EPA has added Spring Creek & Osage Creek listings for total phosphorus to each Arkansas § 303(d) list. Recently, the Cities of Rogers and Springdale conducted a study of these waters (without consulting EPA) and concluded the streams were meeting the narrative nutrient standards. ADEQ agrees with the conclusion of the cities. However, notwithstanding the overall conclusion of the municipal study, EPA staff found that the streams were not meeting all applicable standards. The data and information generated by the study supports EPA's position that the fisheries designated use and biological integrity narrative standards are not attained, and the report includes multiple lines of evidence supporting phosphorus as a cause of non-attainment. Spring and Osage Creeks are tributaries to the Illinois River, but the Region's efforts to develop a model and TMDL(s) for the Illinois Basin will be driven primarily by numeric standards in Oklahoma waters rather than impairments in Arkansas. The modeling/TMDL work is expected to be completed by late 2013, if additional funding can be obtained.

Arkansas's minerals criteria were developed using an ecoregion approach. These are relative to background conditions and are naturally very low values. EPA and ADEQ have differed in their understanding of their applicability as criteria, and application has varied over 303(d) cycles.

ADEQ listed a substantial number of waters using metals data with quality control/quality assurance issues; Region 6 had recommended these not be included as impaired.

EPA RATIONALE FOR UNAPPROVABLE PORTIONS OF LIST:

ADEQ did not evaluate all readily available data, including data collected by USGS, which accounted for about 30% of EPA's proposed additions (Region 6 shared findings from assessment of USGS data with ADEQ staff prior to development and submittal of the 2012 list).

ADEQ did not submit assessment methods for some provisions of the state's standards, while asserting that all standards were attained in certain waters (including Spring Creek and Osage Creek).

ADEQ applied assessment methods that were not consistent with applicable standards. For example, the state's assessment methodology for turbidity allowed for 25% of observations to exceed criteria while standards read as "shall not exceed" criteria.

ADEQ did not evaluate narrative criteria for toxicants in waters exhibiting ambient toxicity in standard EPA tests conducted during intensive stream surveys (Ouachita River, Mossy Lake, and Coffee Creek).

ADEQ did not evaluate attainment of ecoregion minerals values (chloride, sulfate and total dissolved solids) in their standards.

Region 6 staff assessed readily available data and initially recommended adding 457and 469 waterbody-pollutant pairs to the 2010 and 2012 § 303(d) lists, respectively.

COOPERATIVE EPA/ARKANSAS EFFORTS TO RESOLVE 2010 AND 2012 LISTING ISSUES:

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EPA shared draft decisions with the state and engaged in discussions to resolve as many proposed listings as possible.

In a December 18, 2012, high-level discussion with the Region, the ADEQ Director identified three major issues she had with the Region's proposed additions to the lists: listings due to ecoregion minerals criteria; listing of Mossy Lake for toxicity; and listing of Osage and Spring Creeks.

In response to these discussions, the Region agreed to defer action on listings based on ecoregion minerals criteria; EPA and the state agreed to propose additions based on drinking water and site-specific mineral criteria per state's assessment method. Region 6 also agreed to exclude application of narrative toxicity criteria to Coffee Creek and Mossy Lake, which currently are not designated as supportive of aquatic life.

In addition, EPA and ADEQ came to agreement on the removal of 51 listings and 58 listings, respectively, from our original draft proposed actions.

EPA maintains that Spring Creek and Osage Creek are not meeting all applicable standards, as discussed under notable issues above.

COMMUNITY CONCERNS:

- Oklahoma remains concerned about ongoing eutrophication of interstate waters, including transport of nutrients from Osage and Spring Creeks into the Illinois River and Oklahoma.
- A community neighboring Coffee Creek and Mossy Lake, which receive a discharge from a Georgia Pacific paper facility, has public health concerns with toxics. The state of Louisiana, downstream on the Ouachita River, has historic water quality concerns about interstate transport of pollutants from GP and other facilities.
- Sedimentation is becoming a major concern in the state due to construction and oil/gas activities, as evidenced by a large increase in comments in the state's 2012 responsiveness summary (which may account for increased numbers of turbidity issues).

PATH FORWARD:

Region 6 proposes to postpone action on the 2010 and 2012 lists while we work with ADEQ to remedy their water quality standard and assessment issues. The Region proposes to work with ADEQ on specific actions and a timeline to develop mutually agreed upon assessment methods for 2014 and to evaluate potential changes to water quality standards. Region 6 has provided $300k in §106 grant funding to support ADEQ's efforts to automate data analysis and § 303(d) list development, aimed at modernizing the state's approach, reducing error and making comparison of criteria to available data consistent across stream segments. The state will pursue revision of mineral criteria to protect aquatic life, with technical assistance from EPA. The state and the region have started work with the Office of Science and Technology, who may provide contractor support.

CURRENT STATUS: The Region will consult with OW and OGC to explore any options to take "partial action" on the 2010 and 2012 lists (to approve the acceptable portions of the lists while reserving action on unacceptable portions).

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History

EPA last met in Washington, DC in 2009 with several of these mayors, per a request from Senator Mark Pryor. At that time, the Northwest Arkansas Mayors, as well as Chamber of Commerce representatives, expressed that Northwest Arkansas was committed to preserving and enhancing the water quality of its streams. All of the cities had been involved in developing the Illinois River Watershed Management Plan, and all supported its implementation. Governor Mike Beebe announced the establishment of a Conservation Reserve Enhancement Program (CREP) for the Illinois River in Arkansas – an action believed by local leaders to be the first step in protecting and enhancing the waters of their region. A total of $30 million in federal (USDA), state and local funds was awarded to implement the conservation program. *The Mayors and Chamber asked EPA to join in a partnership with USDA and the region by providing incremental Section 319 funding to implement comprehensive and targeted best management practices and projects in segments of their streams and rivers that appear to be the most impaired by phosphorous.* Since the State of Oklahoma designated the Illinois River a "scenic river," a water quality standard of 0.037 mg/1 for phosphorus applied at the state line. *The delegation urged that EPA ensure that the State of Oklahoma conduct a thorough evaluation of its current standard for total phosphorus by 2012 as pledged under the 2003 Statement of Joint Principles and Actions between Arkansas and Oklahoma.*

- On 1/16/09 EPA objected to NACA's draft permit due to the phosphorus limit of 1.0 mg/1 allowing excessive loadings within Osage Creek which would not have been protective of the Oklahoma water quality standard for the Illinois River at the Oklahoma State line.

- Responding to EPA's objection ADEQ revised the draft to include requirements for upstream and downstream monitoring of total phosphorus and an enforceable effluent limit of 0.1 mg/1 for total phosphorus, effective July 2012.

- EPA determined NACA's compliance with this effluent limit will be protective of applicable water quality standards in both Arkansas and Oklahoma and subsequently withdrew its objection to the draft permit on April 16, 2009.

EPA Cites Arkansas Minerals Law In Rare Partial Repeal Of NPDES Authority

Posted: September 11, 2013

EPA Region VI has partially revoked Arkansas' authority to issue National Pollutant Discharge Elimination System (NPDES) permits -- a rare agency take-back of a state's delegated power -- saying it will review all permits crafted in line with a state law that weakened minerals water standards and that EPA warned conflicts with the Clean Water Act (CWA).

Until further notice. EPA says it is putting on hold its agreement with the Arkansas Department of Environmental Quality (ADEQ) to waive reviews of some draft NPDES permits issued by the state. And the region wants to review all permit applications, draft permits, proposed final permits and other documents written to comply with the new state law.

The decision -- outlined in an Aug. 28 letter from a top Region VI water official to ADEQ -- is prompting warnings from the state's top environmental official that EPA could completely revoke the state's NPDES permitting authority, which would be an extremely rare move and a possible concern for other delegated states.

"One of the ultimate results of this could be that they're going to federalize those permits," ADEQ Director Teresa Marks told the *Arkansas Times*, according to an Aug. 30 article. "Which means they will take them over, they will issue them. If they do that, it won't just be the minerals section of the permit, it will be the entire permit, whether it's metals, minerals, nutrients. … And then they will also take over the enforcement and inspection of the permit. They would be here in Arkansas, boots on the ground, dealing with our industries," Marks said.

Region VI's decision follows the state General Assembly's approval of legislation known as Act 954, which took effect Aug. 16. A state review panel, the Arkansas Pollution Control & Ecology Commission (PC&E), is scheduled to meet Sept. 27 to revise the state's NPDES regulations to conform with Act 954.

One of the law's key provisions revokes a drinking water designation -- currently applied to all waters in Arkansas -- for waters that are not providing drinking water or are projected to in a state water plan. Still pending are ADEQ revisions to a regulation to remove the drinking water designations, as ordered in the law.

But the law has already prompted concerns about its potential adverse impact on water in the state, as it could lead to degraded water quality because affected waters would have to meet weaker standards for a less-protected designation. An environmentalist lawyer says the move would affect roughly 75 percent of the state's waters.

The legislation says it is an "inefficient use of scarce resources" to apply drinking water designations so widely because of "the existing technological and economic limits on treatability of dissolved minerals."

EPA's Concerns

But EPA raised concerns about the bill before it became law, with Region VI saying in Feb. 26 comments on the bill that standards for "existing uses" -- which under the CWA include waters that previously served as a public drinking water supply -- cannot be weakened. EPA also said

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states can modify designations only after conducting a scientific assessment of the water body known as a "use attainability analysis."

In March 11 comments, ADEQ added, "Changing water quality standards through legislation, which goes into effect immediately, will place ADEQ in the impossible position of implementing standards that have not been adopted by regulation or approved by EPA. This is inconsistent with Section 303(c) of the federal Clean Water Act."

The state legislature's decision to approve the bill has now prompted the Aug. 28 letter from Region VI Water Quality Protection Division Director William Honker to ADEQ Deputy Director Ryan Benefield saying that the agency is rescinding its decision to waive federal review of NPDES permits crafted in line with the law.

And observers suggest that if the state pushes ahead with full implementation of the law, it may prompt a total revocation of the state's NPDES powers.

One Arkansas advocate who opposed the law says the upcoming PC&E meeting to discuss revising regulations to comply with Act 954 could prompt EPA to take the more drastic step of entirely revoking Arkansas' water permit authority. "I don't think EPA will frankly have any choice," the source says, adding that if the agency does not take that step it could face a citizen suit forcing it to do so.

"Some of the Arkansas lawmakers are trying to paint this as EPA kind of overstepping their bounds," the source says. "It's quite the opposite. It's the state of Arkansas trying to weaken federal law through state legislation, which is not legal. EPA doesn't have any choice but to enforce federal law."

Permit Reviews

The environmentalist attorney says EPA's decision to drop the waived review of NPDES permits applies only to minerals permits, which cover pollutants such as total dissolved solids, chlorides and sulfates. It remains unclear, the attorney says, if future actions by the agency would affect only that category or all permits.

"If they [PC&E] haul off and pass these changes to the regulation further implementing Act 954 . . . well then maybe ADEQ is going to lose their ability to even write the permit in the first place," the lawyer says, acknowledging it's difficult to know what EPA's next move will be. "I just don't know how far they'll let them go with these changes to [the NPDES regulation] and still allow ADEQ to prepare the permit. If you get to the point where you're going to have to re-write the whole thing, then why [allow the state to] take a stab at it in the first place?"

On the same day as it revoked the review waiver, Region VI rejected a move by state officials to stay existing permit limits for a Tyson Foods facility while the state's water quality standards are revised under Act 954. The lawyer speculated that the request "just flat-out irritated" the agency.

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In its comments on the legislation. EPA called the provision allowing such a waiver of existing limits "particularly troublesome." In a letter rejecting the request, it says the CWA does not "provide for a stay of final permit limits pending revision of the permit." The existing limits, the agency says, remain in effect and failure to comply would subject the facility to federal enforcement action and a possible citizen lawsuit. -- *Lee Logan (llogan@iwpnews.com)*

City Profiles:
Fayetteville: Population: 73,580
Springdale: Population: 69,797

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ILLINOIS RIVER WATERSHED MODELING

QUESTION: Why is EPA developing water quality models for Lake Tenkiller in Oklahoma and the Upper Illinois River Watershed in northwest Arkansas and northeast Oklahoma?

ANSWER:

- The EPA is developing water quality models to support ongoing efforts by the States of Arkansas and Oklahoma and the Cherokee Nation to address water quality impairments in the Illinois River Watershed and Lake Tenkiller. Having revised earlier versions of the models to resolve technical issues raised by the tribe and the states, EPA and our state and tribal partners consider the models ready for review by external stakeholders, including municipalities, industry, and environmental interest groups. Once stakeholder comments are received, EPA will work with our state and tribal partners to evaluate the comments and effect any necessary changes to the models.
- Ultimately, EPA will provide final versions of the water quality models to our state and tribal partners, along with extensive text documentation, to support their efforts to reduce the impact of nutrients in the Illinois River Watershed and Lake Tenkiller.
- This effort exemplifies how the EPA and the states can work together to meet their CWA requirements even when challenges cross state lines.

BACKGROUND:

- The EPA's efforts to develop two water quality models, one for the Illinois River Watershed Basin and another for Lake Tenkiller, began in late 2009.
- In cooperation with the Cherokee Nation and the States of Arkansas and Oklahoma, the EPA Region 6 developed draft water quality models to address nutrient (especially phosphorus)impairments in the Illinois River Watershed and Lake Tenkiller. Portions of the river in both states are included on the states' Clean Water Act Section 303(d) lists of impaired waters. Lake Tenkiller is listed as impaired by the State of Oklahoma.
- Between April and November of 2016, Region 6 convened a total of six Technical Workgroup Meetings with state and tribal representatives to refine draft versions of the models. Oklahoma and Arkansas provided detailed comments on the modeling efforts.
- Region 6 revised the draft models to improve their calibrations in response to state and tribal stakeholder comments, and has built broad consensus among the regulatory partners in both Oklahoma and Arkansas that the models are ready to be used for evaluating water quality restoration approaches.
- Phosphorus levels in the Illinois River are impacted by municipal discharges and nonpoint sources (i.e., runoff from poultry litter application sites). Downstream impacts to Lake Tenkiller are reflected by high chlorophyll-*a* and low dissolved oxygen levels in the water, which result from nutrients including phosphorus.
- In August of 2016, members of the Arkansas and Oklahoma Congressional Delegations expressed interest in the EPA's modeling efforts on behalf of their constituents. Responses were provided in September and November of 2016.
- Since the beginning of the project, the EPA has expended about $1.5M. The EPA has committed approximately 0.5 FTE to overseeing the project.

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Originator: Tim Fontaine, OW, 202-564-0318
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January 29, 2018