

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

JAN 24 2008

Steve Drown Chief, Water Division Arkansas Department of Environmental Quality 5301 Northshore Drive North Little Rock, AR 72118-5317

RE: Arkansas Triennial ("Phase I") Revisions to Regulation No. 2

Dear Mr. Drown:

Thank you for your recent letter, dated November 20, 2007, requesting review and approval of several revisions to Arkansas' Regulation No. 2, Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas. This letter pertains to the U.S. Environmental Protection Agency's (EPA) review of Arkansas' triennial "Phase I" revisions adopted by the Arkansas Pollution Control and Ecology Commission (APC&EC or Commission) via Minute Order No. 07-35 on September 28, 2007.

"Phase I" of Arkansas' triennial review focused on issues related to Extraordinary Resource Waters (ERWs), Ecologically Sensitive Waterbodies (ESWs), and Natural and Scenic Waterways (NSWs) within the State of Arkansas. The triennial "Phase I" review resulted in revisions to Regulations 2.304 and 2.306, along with the development of new Regulations 2.310 and 2.311, and new Appendices D, E, and F. In summary, these new and revised provisions establish processes for determining whether a proposed physical habitat alteration to an ERW, ESW, and NSW is "significant," for removing an ERW, ESW, or NSW designated use from a free-flowing waterbody for the purpose of constructing a reservoir to provide a domestic water supply, and for adding the ERW, ESW, or NSW designated use to a waterbody.

As noted above, these revisions were submitted by the Arkansas Department of Environmental Quality (ADEQ or Department) for EPA review via letter dated November 20, 2007, as required under federal regulations at 40 C.F.R. 131.5, along with an attorney's statement certifying that the revised water quality standards (WQS) were duly adopted pursuant to the laws of the State of Arkansas. EPA received the WQS submission on November 26, 2007.

For reasons described in the enclosed Record of Decision (ROD), EPA is hereby disapproving the WQS revisions to Regulation 2.304 and associated new Appendix D. Please note that based on the record associated with them, it appears the State's revisions to Regulation 2.304 were intended to accommodate construction of low head weirs in ERWs, ESWs, or NSWs as an alternative to removing the ERW, ESW, or NSW designated use for the purpose of constructing a reservoir to provide a domestic water supply. However, the revisions to Regulation 2.304 were not facially limited to that alternative, and, as explained in EPA's

enclosed ROD, the use of the word "impair" would also have allowed authorization of other activities resulting in substantially greater degradation than the State associates with low head weirs. Today's disapproval of the revisions to Regulation 2.304 should not be regarded as expressing any EPA view on whether the use of such weirs might be approved under Regulation 2.305.

In addition, as further described in the enclosed ROD, EPA is taking no action on revisions to Regulation 2.306, new Regulations 2.310 and 2.311, and associated new Appendices E and F. These revisions to Regulation No. 2 establish State procedures and decisional criteria that do not constitute new or revised WQS, and are thus not subject to EPA review under Clean Water Act (CWA) § 303(c). However, if and when the State exercises Regulations 2.310 or 2.311, any resulting revisions to a use designation would constitute a new or revised WQS requiring submission to EPA for review and approval/disapproval. In order for EPA to approve such revisions they must comply with CWA § 303(c) and EPA's implementing regulation at 40 C.F.R. § 131.10.

Section 7(a)(2) of the Endangered Species Act (ESA), requires that federal agencies consult with the U.S. Fish & Wildlife Service and/or National Marine Fisheries Service, as appropriate, to insure that actions they take, fund, or authorize are not likely to jeopardize the continued existence of listed species or result in the adverse modification or destruction of critical habitat. In accordance with the Service's consultation regulation at 50 C.F.R. § 402.14(a), EPA has determined that today's decision will have no effect upon listed species or critical habitat in Arkansas. Under 40 C.F.R. §131.21(c), new and revised standards do not go into effect for CWA purposes until approved by EPA. Therefore, the previously approved Regulation 2.304 remains in effect for CWA purposes. Further, as noted above, EPA has neither approved nor disapproved revisions to Regulation 2.306, new Regulations 2.310 and 2.311, and new Appendices E and F. As such, there is no EPA action upon which the Agency needs now consult. If Arkansas' utilization of the procedures in Regulations 2.310 and 2.311 results in a future revision to its WQS, however, such WQS revisions will themselves be subject to EPA review and approval on a case-by-case basis. Whether EPA action on such revisions warrants ESA consultation will be determined at that time.

I would like to acknowledge the efforts of the Commission and the Department, in the development of these revised standards, and in particular, the State's efforts to inform and involve the citizens of Arkansas in this WQS revision process. We look forward to working with you during the next triennial review. If you have any questions or concerns, please contact me at (214) 665-7101, or have your staff contact Melinda McCoy at (214) 665-8059.

Sincerely yours,

WK Hoh Miguel I. Flores

/ Director

Water Quality Protection Division

## **RECORD OF DECISION:**

# REGULATION NO. 2: REGULATION ESTABLISHING WATER QUALITY STANDARDS FOR SURFACE WATERS OF THE STATE OF ARKANSAS

Revisions Adopted by the Arkansas Pollution Control and Ecology Commission via Minute Order No. 07-35

U.S. EPA REGION 6
WATER QUALITY PROTECTION DIVISION
January 2008

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#### I. Introduction

#### Background

As described in § 303(c) of the Clean Water Act (CWA) and in the water quality standards (WQS) regulation at 40 C.F.R. § 131.20, states and authorized tribes have primary responsibility to develop and adopt WQS to protect their waters. State and tribal WQS consist of three primary components: designated uses, criteria to support those uses, and an antidegradation policy. In addition, CWA § 303(c)(1) and 40 C.F.R. § 131.20 require states to hold public hearings at least once every three years to review and, as appropriate, modify and adopt standards. Under 40 C.F.R. § 131.21, the Environmental Protection Agency (EPA) reviews new and revised surface WQS that have been adopted by states and authorized tribes. Authority to approve or disapprove new and/or revised standards submitted to EPA for review has been delegated to the Water Quality Protection Division Director in Region 6. State or tribal water quality standards are not considered effective under the CWA until approved by EPA.

The purpose of this Record of Decision is to provide the basis for EPA's review and actions concerning revisions to Regulation No. 2: Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas adopted by the Arkansas Pollution Control and Ecology Commission (APC&EC or Commission) via Minute Order No. 07-35 on September 28, 2007.

#### Chronology of Events

On January 13, 2006, the River Valley Regional Water District (RVRWD) filed a petition with the APC&EC to initiate third party rulemaking to amend Regulation No. 2. RVRWD is a public, nonprofit regional water distribution district whose mission is "to acquire safe and dependable water supplies and to distribute water efficiently to consumers and communities in the Crawford County area" of Arkansas. Through its petition, the RVRWD proposed amendments to Regulation 2.304 ("Physical Alteration of Habitat") of the State's WQS that would "establish a procedure by which regional water distribution districts and other public water authorities would be able to seek Commission approval to use extraordinary resource waters as a source of drinking water supply." The petition also referred to RVRWD's plans to utilize water from upper Lee Creek (an Extraordinary Resource Water), that would be impounded by the proposed Pine Mountain Dam, as a source of drinking water supply.

While the petition specifically referred to Extraordinary Resource Waters (ERWs), the proposed amendments described in the petition would have also applied to Ecologically Sensitive Waterbodies (ESWs) and Natural and Scenic Waterways (NSWs). ERWs, ESWs, and NSWs are also each identified as "outstanding state or national resource" waters (ONRWs) in Arkansas' antidegradation policy in Regulation 2.203 of the State's WQS.

The public comment period on the proposed amendments associated with RVRWD's petition ended on June 2, 2006. The APC&EC directed both RVRWD and the Arkansas Department of Environmental Quality (ADEQ or Department) to prepare and file a

Statement of Basis and Purpose and a Responsiveness Summary to comments received on the proposed amendments.

In its June 28, 2006, Statement of Basis and Purpose on RVRWD's petition, ADEQ formally responded to the petition stating that: "An amendment to Regulation No. 2 with such far-reaching effects is best brought forward during the Department's triennial review of [Arkansas'] water quality standards" (brackets added).

Accordingly, ADEQ began its triennial review of Regulation No. 2 on February 10, 2006, approximately one month after RVRWD filed its petition to initiate third party rulemaking. ADEQ organized its triennial review into two phases. "Phase I" of the review focused on issues related to ERWs, ESWs, and NSWs, and sought to develop alternative revisions to RVRWD's proposed amendments to Regulation No. 2. As a result of this process, APC&EC eventually adopted ADEQ's proposed amendments to Regulation No. 2 instead of RVRWD's proposed amendments. EPA received the adopted amendments to Regulation No. 2 on November 26, 2007. Provided below is a detailed chronology of events associated with ADEQ's triennial "Phase I" review.

February 10, 2006	The ADEQ issued a news release announcing seven public informational meetings to begin its triennial review of Regulation No. 2.
March 2, 2006	ADEQ held a public meeting on the triennial review of Regulation No. 2 at Northridge Middle School in Van Buren, Arkansas.
March 9, 2006	ADEQ held a public meeting on the triennial review of Regulation No. 2 at Arkansas State University in Mountain Home, Arkansas.
March 16, 2006	ADEQ held a public meeting on the triennial review of Regulation No. 2 at South Arkansas Community College in El Dorado, Arkansas.
March 23, 2006	ADEQ held a public meeting on the triennial review of Regulation No. 2 at the Clarion Inn in Fayetteville, Arkansas.
March 30, 2006	ADEQ held a public meeting on the triennial review of Regulation No. 2 at Henderson State University in Arkadelphia, Arkansas.
April 6, 2006	ADEQ held a public meeting on the triennial review of Regulation No. 2 at the Nettleton High School Commons in Jonesboro, Arkansas.
April 13, 2006	ADEQ held a public meeting on the triennial review of Regulation No. 2 at the State Police Headquarters in Little Rock, Arkansas.

<b>M</b> ay 30, 2006	ADEQ held its first "2007 Triennial Review Work Group" meeting in Little Rock, Arkansas.
June 12, 2006	ADEQ held its second "2007 Triennial Review Work Group" meeting in Little Rock, Arkansas.
June 22, 2006	ADEQ held its third "2007 Triennial Review Work Group" meeting in Little Rock, Arkansas.
July 20, 2006	ADEQ held its fourth "2007 Triennial Review Work Group" meeting in Little Rock, Arkansas, during which the Department presented its July 20, 2006, draft of proposed revisions to Regulation No. 2.
August 21, 2006	Melinda Nickason, Arkansas WQS Coordinator, EPA Region 6, sent comments electronically to Ellen Carpenter, Chief, Legal Division, ADEQ, on the Department's July 20, 2006, draft of proposed revisions to Regulation No. 2.
August 22, 2006	ADEQ held its fifth "2007 Triennial Review Work Group" meeting in Little Rock, Arkansas, during which the Department presented its August 18, 2006, draft of proposed revisions to Regulation No. 2.
September 8, 2006	ADEQ filed a petition with the Commission to initiate rulemaking to amend Regulation No. 2.
September 19, 2006	River Valley Regional Water District filed a motion with the Commission to deny ADEQ's petition to initiate rulemaking.
September 19, 2006	ADEQ filed an amended petition with the Commission to initiate rulemaking to amend Regulation No. 2.
September 21, 2006	ADEQ filed a second amended petition with the Commission to initiate rulemaking to amend Regulation No. 2.
September 22, 2006	The Commission's Regulations Committee met to review ADEQ's second amended petition and voted to refer the matter to the entire Commission.
September 22, 2006	The Commission accepted the recommendation of the Regulations Committee concerning ADEQ's second amended petition and initiated the rulemaking proceeding (Docket No. 06-010-R) via Minute Order No. 06-39.
October 1-2, 2006	ADEQ published a public notice concerning the proposed rulemaking in the <i>Arkansas Democrat</i> – <i>Gazette</i> .
November 16, 2006	ADEQ held a public hearing on the proposed rulemaking at Arkansas State University in Mountain Home, Arkansas.
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	November 20, 2006	ADEQ held a public hearing on the proposed rulemaking at the Clarion Inn in Fayetteville, Arkansas.
	November 27, 2006	ADEQ held a public hearing on the proposed rulemaking at South Arkansas Community College in El Dorado, Arkansas.
	December 4, 2006	ADEQ held a public hearing on the proposed rulemaking at Northridge Middle School in Van Buren, Arkansas.
	December 11, 2006	ADEQ held a public hearing on the proposed rulemaking at Harrison High School in Harrison, Arkansas.
	January 4, 2007	ADEQ held a public hearing on the proposed rulemaking at National Park Community College in Hot Springs, Arkansas.
	January 4, 2007	ADEQ held a public hearing on the proposed rulemaking at the Montgomery County Courthouse in Mount Ida, Arkansas.
	January 18, 2007	ADEQ held a public hearing on the proposed rulemaking at Arkansas Tech University in Russellville, Arkansas.
	January 18, 2007	ADEQ held a public hearing on the proposed rulemaking at Henderson State University in Arkadelphia, Arkansas.
	January 22, 2007	ADEQ held a public hearing on the proposed rulemaking at the State Police Headquarters in Little Rock, Arkansas.
	February 1, 2007	Miguel Flores, Director, Water Quality Protection Division, EPA Region 6, sent comment letter regarding proposed revisions to Regulation No. 2 to Doug Szenher, Public Outreach and Assistance Division, ADEQ.
	February 5, 2007	The public comment period ended on the proposed rulemaking to amend Regulation No. 2.
·.	April 13, 2007	ADEQ filed a motion with the Commission to extend its time to file a <i>Statement of Basis and Purpose</i> and <i>Responsiveness Summary</i> until June 1, 2007.
	April 27, 2007	The Commission passed Minute Order No. 07-12 granting ADEQ an extension of time to file a <i>Statement of Basis and Purpose</i> and <i>Responsiveness Summary</i> until June 1, 2008.
	May 25, 2007	Melinda Nickason, Arkansas WQS Coordinator, EPA Region 6, sent comments electronically to Bob Singleton, Water Quality Planning Branch, Water Division, ADEQ, on the Department's June 2007, draft of proposed revisions to Regulation No. 2.
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Teresa Marks, Director, ADEQ, sent a letter to Dana Samples, June 1, 2007 Chair, APC&EC, and Randy Young, Chair, Regulations Committee, APC&EC, requesting an extension of time to file a Statement of Basis and Purpose and Responsiveness Summary until June 8, 2007. Michael O'Malley, Administrative Hearing Officer, APC&EC, June 1, 2007 sent a letter to Teresa Marks, Director, ADEQ, granting ADEQ an extension of time to file a Statement of Basis and Purpose and Responsiveness Summary until June 8, 2007. ADEQ held its sixth "2007 Triennial Review Work Group" June 4, 2007 meeting in Little Rock, Arkansas, during which the Department presented its June 2007, draft of proposed revisions to Regulation No. 2. ADEQ filed a Statement of Basis and Purpose and June 8, 2007 Responsiveness Summary for proposed amendments to Regulation No. 2 with the APC&EC. ADEQ formally presented the final proposed amendments to July 5, 2007 Regulation No. 2 to the Administrative Rules and Regulations Subcommittee of the Legislative Council. ADEQ formally presented the final proposed amendments to August 15, 2007 Regulation No. 2 to the Agriculture, Forestry, and Economic Development Subcommittee of the Legislative Council and received approval from the Subcommittee. Teresa Marks, Director, ADEQ, sent a letter to Thomas August 24, 2007 Schueck, Chair, APC&EC, and Randy Young, Chair, Regulations Committee, APC&EC, requesting an extension of time to present the final proposed amendments to Regulation No. 2 to the APC&EC for final adoption at the regularly scheduled September Commission meeting. Michael O'Malley, Administrative Hearing Officer, APC&EC, August 24, 2007 sent a letter to Teresa Marks, Director, ADEQ, granting ADEQ an extension of time to present the final proposed amendments to Regulation No. 2 to the APC&EC for final adoption at the regularly scheduled September Commission meeting. ADEQ again formally presented the final proposed September 6, 2007

September 7, 2007 ADEQ filed with APC&EC a motion to adopt the final proposed amendments to Regulation No. 2.

received approval from the Subcommittee.

amendments to Regulation No. 2 to the Administrative Rules and Regulations Subcommittee of the Legislative Council and

September 20, 2007	ADEQ formally presented the final proposed amendments to Regulation No. 2 to the Public Health and Welfare Committee of the Legislative Council and received approval from the Committee.
September 28, 2007	ADEQ formally presented the final proposed amendments to Regulation No. 2 to the Regulations Committee of the APC&EC.
September 28, 2007	ADEQ formally presented the final proposed amendments to Regulation No. 2 to the APC&EC for adoption.
September 28, 2007	The Commission adopted the final proposed amendments to Regulation No. 2 via Minute Order No. 07-35.
October 1, 2007	ADEQ sent two copies of the adopted amendments to Regulation No. 2 to the Arkansas Secretary of State.
October 10, 2007	The final amendments to Regulation No. 2 adopted via Minute Order No. 07-35 became effective under State law.
November 26, 2007	Miguel Flores, Director, Water Quality Protection Division, EPA Region 6, received a letter dated November 20, 2007, from Steve Drown, Chief, Water Division, ADEQ, submitting the final amendments to Regulation No. 2 for EPA's review and approval.

## Summary of Revisions to Regulation No. 2

In its June 8, 2007, Statement of Basis and Purpose, ADEQ stated that the triennial "Phase I" revisions to Regulation No. 2 "are intended to balance vital interests of the citizens of Arkansas for protecting ERWs, ESWs, and NSWs and providing potential drinking water supplies." New Regulation 2.310 and associated Appendix E establish a procedure for removing the ERW, ESW, or NSW designated use from a waterbody for the purpose of creating a reservoir to provide a domestic water supply. New Regulation 2.311 and associated Appendix F provide a procedure for adding the ERW, ESW, or NSW designated use to a waterbody or segment of a waterbody. Revisions to Regulation 2.306 reflect the inclusion of new Regulation 2.310 into Arkansas' WQS by adding references to ERWs, ESWs, and NSWs in both the title of Regulation 2.306 and within its text. Revisions to Regulation 2.304 and associated new Appendix D provide a procedure for the State of Arkansas to use in determining that a proposed physical alteration of habitat in an ONRW is not significant.

Revised Regulations 2.304 and 2.306, as well as new Regulation 2.310, 2.311, and Appendices D, E, and F are provided in Attachments A through G of this record of decision.

## II. New or Revised Provisions for Which EPA is Taking No Action

## Regulation No. 2.310, 2.311, and Appendices E and F

EPA regulations at 40 C.F.R. § 131 require that WQS include beneficial use designations for all waters of a state consistent with 40 C.F.R. § 131.10, water quality criteria supporting those use designations consistent with 40 C.F.R. § 131.11, and an antidegradation policy consistent with 40 C.F.R. § 131.12. In addition, 40 C.F.R. § 131.13 allows, but does not require, states to include policies affecting application of their WQS, e.g., mixing zone and variance policies.

State agencies charged with adopting and revising WQS may, and frequently do, include other types of regulations in their codification of WQS. That, however, does not render such regulations WQS per se and thus does not require that EPA review them pursuant to CWA § 303(c). Historically, however, EPA Region 6 has generally reviewed such regulations for consistency with the CWA when they were submitted by a state along with regulations that were in fact WQS. Recent litigation has called the wisdom of that approach into question. See, e.g., Florida Public Interest Research Group Citizen Lobby v. EPA, 386 F.3d 1070 (11<sup>th</sup> Cir. 2004). Region 6 is accordingly being somewhat more circumspect here than in some past actions.

Regulations 2.310 and 2.311 and associated Appendices E and F establish State procedures and decisional criteria for adding and removing the specific designated uses of "Extraordinary Resource Water," "Ecologically Sensitive Waterbody," or "Natural and Scenic Waterway." These regulations do not establish and are not themselves designated uses, water quality criteria, or an antidegradation policy. Therefore, they do not constitute new or revised WQS. Because Regulations 2.310, 2.311, and Appendices E and F are not new or revised WQS, EPA takes no action on them. However, if and when the State exercises Regulations 2.310 or 2.311, any resulting revisions to a use designation would constitute a new or revised WQS requiring submission to EPA for review and approval/disapproval. In order for EPA to approve such revisions they must comply with CWA § 303(c) and EPA's implementing regulation at 40 C.F.R. § 131.10.

## Regulation No. 2.306

The State's revision to Regulation 2.306 reflects Arkansas' adoption of new Regulation 2.310. As revised, Regulation 2.306 now states (with deletions denoted by a line through the text and additions denoted by underlined text):

Reg. 2.306 Procedures for Removal of Any Designated Use Except Fishable/Swimmable, Extraordinary Resource Water, Ecologically Sensitive Waterbody, or Natural and Scenic Waterway, and Modification of Water Quality Criteria not Related to Fishable/Swimmable These Uses

This procedure is applicable in those cases where the Commission chooses to establish less stringent water quality criteria without affecting a fishable/swimmable use or the designated use of Extraordinary Resource Water or Ecologically Sensitive Waterbody or Natural and Scenic Waterway, or when the Commission chooses to remove a use other than fishable/swimmable which is not an existing use other than fishable/swimmable, Extraordinary Resource Water, Ecologically Sensitive Waterbody, or Natural and Scenic Waterway.

The Commission may allow a modification of the water quality criteria or the removal of a use which is not a fishable/swimmable use <u>or designated</u> use of Extraordinary Resource Water or

Ecologically Sensitive Waterbody or Natural and Scenic Waterway to accommodate important economic or social development in a local area, if existing uses are maintained and protected fully and the requirements for public participation in the Continuing Planning Process are met. As a minimum, the following information shall be submitted to the Department Director before initiation of the public participation process:

- (A) Technological or economic limits of treatability.
- (B) Economic analysis of the impact on the local area.
- (C) Documentation that the use being removed is not an existing use and that all other designated uses will be protected.

Modifications made pursuant to this section may be required to be rejustified for continued support. As community water needs change, or technological advancement, including long-term environmental improvement projects, make treatment options more practicable, the Commission may reevaluate the need for the reestablishment of the more stringent water quality criteria or the removed use.

Any waterbody on which such alterations are approved will be so listed in Appendix A with the applicable changes noted.

These revisions to Regulation 2.306 provide clarification that the procedures in Regulation 2.306 are not applicable to the ERW, ESW, and NSW designated uses, since new Regulation 2.310 applies to these three uses. As such, these revisions to Regulation 2.306 do not establish and are not themselves designated uses, water quality criteria, or an antidegradation policy and, therefore, do not constitute new or revised WQS. Because the revisions to Regulations 2.306 are not new or revised WQS, EPA takes no action on them.

## III. New or Revised Provisions EPA is Disapproving

## Regulation No. 2.304 and Appendix D

The State's revision to Regulation 2.304 affects the stringency of Arkansas' antidegradation policy and is thus subject to EPA review under CWA § 303(c). As revised, the regulation now states (with revisions denoted by underlined text):

- (A) Significant physical alterations of the habitat within extraordinary resource waters, ecologically sensitive waterbodies or natural and scenic waterways are not allowed. For the purposes of this subsection, the Director may determine that a proposed physical alteration of the habitat is not significant if it is demonstrated that:
  - (1) The proposed physical alteration of habitat (a) will not impair water quality; (b) will not impair the natural flow regime; and (c) will not impair the habitat of fish, shellfish, or other forms of aquatic life; and

(2) there is no feasible alternative to the proposed project.

A request under this subsection for a determination that a proposed physical alteration of habitat is not significant shall be submitted to the Director in accordance with the procedures set forth in Appendix D.

(B) In other waters, where significant physical alterations of the habitat are proposed, the Department must be assured that no significant degradation of any existing use or water quality necessary to protect that use will occur. In order to make such determinations, the Department may require an evaluation of all practicable alternatives to the project including: an environmental assessment of the impacts of each alternative, an engineering and economic analysis, and a socio-economic evaluation of the project in the local area.

Adoption of these revisions alters Arkansas' application of its previously approved antidegradation policy by expanding or clarifying its views on allowable "not significant" degradation in an ONRW (i.e., ERW, ESW, or NSW). A question thus arises on whether allowing such degradation is consistent with 40 C.F.R. § 131.12(a)(3). It is not.

40 C.F.R. § 131.12(a)(3) generally prohibits authorization of an activity that diminishes ONRW water quality as it exists when the activity is authorized. That prohibition is facially absolute, but EPA has long interpreted 40 C.F.R. § 131.12(a)(3) as permitting some limited activities resulting in temporary and short term changes in the water quality of an ONRW. See 40 Fed. Reg. 51400, 51402 (November 8, 1983). It has also interpreted the term "degradation" as referencing detectable, rather than hypothetical, decreases in ONRW water quality. See <u>Arkansas</u> v. <u>Oklahoma</u>, 503 U.S. 91 (1992). A state's discretion for allowing ONRW water quality degradation is thus limited both as to magnitude (no detectable degradation) and duration (short term and temporary). When approved, the term "significant" in Regulation 2.304 was presumably subject to interpretation consistent with either or both of these limitations.

Under the revision at issue here, however, physical alterations to ONRWs would be allowed unless they "impair water quality." <sup>1</sup> Under the CWA, "impair" is a term of art that is somewhat narrower than its dictionary definition. "Impaired water," for instance, is typically used to characterize a water not attaining its designated uses and that must

<sup>&</sup>lt;sup>1</sup> Given the State regulation's use of the term "water quality," it is not necessary to here determine whether "flow regime" and "habitat of fish, shellfish, or other forms of aquatic life" in Regulation 2.304(A) are encompassed by the term "water quality" in 40 C.F.R. §131.12(a)(3). Suffice it to say that both regulations should provide the highest level of antidegradation protection to "the chemical, physical, and biological integrity" of ONRWs.

accordingly be "listed" pursuant to CWA § 303(d). Consistent with such usage, Arkansas' Regulation 2.106 defines "impairment" as:

Exceedances of the water quality standards by a frequency and/or magnitude which results in any designated use of a waterbody to fail to be met as a result of physical, chemical or biological conditions.

Given that definition of "impairment," the revised Regulation 2.304 prohibits only ONRW water quality degradation that precludes attainment of a designated use. In other words, physical alterations in an ONRW could presumably be authorized unless they caused exceedances of applicable criteria supporting the water's designated uses by a frequency and/or magnitude such that the designated use was no longer supported. When ONRW water quality was higher than water quality criteria associated with its designated uses, the revisions to Regulation 2.304 would allow authorization of detectable degradation of existing water quality as long as the ONRW continued to comply with applicable criteria. As such, the revisions to Regulation 2.304 are inconsistent with the prohibition of 40 C.F.R. § 131.12(a)(3) against authorizing an activity that detectably diminishes existing ONRW water quality.

Further, the word "frequency" in the State's definition of impairment could presumably allow authorization of physical alterations causing recurring, e.g., seasonal, degradation of an ONRW as long as it continued to attain its designated use. Each recurrence might be viewed as "short term and temporary," but in the aggregate they could be long term and permanent. For that reason also, the revisions to Regulation 2.304 are inconsistent with 40 C.F.R. § 131.12(a)(3).

As revised, Regulation 2.304(A) provides no more antidegradation protection to ONRW water quality than Regulation 2.304(B) provides other Arkansas waters. The revisions to Regulation 2.304 are inconsistent with federal requirements and EPA accordingly disapproves them, including referenced Appendix D. Under 40 C.F.R. § 131.21(c), new and revised standards do not go into effect for CWA purposes until approved by EPA. Therefore, the previously approved Regulation 2.304 remains in effect for CWA purposes.

Water quality criteria are a commonly used factor for determining whether designated uses are attained. A state's regulatory description of a designated use, however, may itself provide additional factors that may be considered in determining compliance with WQS. See <u>P.U.D. No. 1 of Jefferson County v. Washington Dept.</u> of Ecology, 511 U.S. 700 (1994).

## Attachment A – Revisions to Regulation 2.304<sup>3</sup>

#### Reg. 2.304 Physical Alteration of Habitat

(A) Significant physical alterations of the habitat within extraordinary resource waters, ecologically sensitive waterbodies or natural and scenic waterways are not allowed. For the purposes of this subsection, the Director may determine that a proposed physical alteration of the habitat is not significant if it is demonstrated that:

(1) the proposed physical alteration of habitat (a) will not impair water quality; (b) will not impair the natural flow regime; and (c) will not impair the habitat of fish, shellfish or other forms of aquatic life; and

(2) there is no feasible alternative to the proposed project.

A request under this subsection for a determination that a proposed physical alteration of habitat is not significant shall be submitted to the Director in accordance with the procedures set forth in Appendix D.

(B) In other waters, where significant physical alterations of the habitat are proposed, the Department must be assured that no significant degradation of any existing use or water quality necessary to protect that use will occur. In order to make such determinations, the Department may require an evaluation of all practicable alternatives to the project including: an environmental assessment of the impacts of each alternative, an engineering and economic analysis, and a socio-economic evaluation of the project in the local area.

<sup>&</sup>lt;sup>3</sup> Revisions are denoted by underlined text. Comparison is from Arkansas Water Quality Standards (Regulation No. 2) version dated April 23, 2004 ("2004 Triennial Revision"), to version dated September 28, 2007 ("2007 Triennial Revision").

## Attachment B - New Appendix D

APPENDIX D: PROCEDURES FOR OBTAINING DIRECTOR'S DETERMINATION ON THE PROPOSED PHYSICAL ALTERATION OF AN EXTRAORDINARY RESOURCE WATERS, ECOLOGICALLY SENSITIVE WATERBODY, OR NATURAL AND SCENIC WATERWAY

#### I. CONTENTS OF REQUEST FOR DETERMINATION

Any person may submit a written request to the Department seeking a determination on whether or not a proposed project will constitute a significant physical alteration of the habitat of an extraordinary resource water, ecologically sensitive waterbody, or natural and scenic waterbody. Such request shall include, at a minimum:

- (A) A map depicting the location of the proposed project and the area to be altered by the project;
- (B) A description of the project, including detailed design plans;
- (C) An analysis of alternatives to the proposed project, including: an environmental assessment of the impacts of each alternative, the costs associated with each alternative, an engineering and economic analysis, and a socioeconomic evaluation of the project to the local area; and
- (D) A technical report containing supporting documentation to demonstrate that the proposed project:
  - (1) will not impair water quality;
  - (2) will not impair the natural flow regime; and
    - (3) will not impair the habitat of fish, shellfish, or other forms of aquatic life

#### II. DEPARTMENT REVIEW OF REQUEST

- (A) Upon receipt of the request and supporting documentation identified above, the Department shall review the alternatives analysis referenced in Appendix D, I (C). The Department may consult with professionals, as necessary, in reviewing the report. The Department shall review the alternatives analysis in order to:
  - (1) ensure that the alternatives analysis is complete;
  - (2) evaluate whether the analysis adequately addresses the environmental, social, and economic costs and impacts of each alternative; and
  - (3) determine whether any feasible alternatives exist for the proposed project.
- (B) Following review of the alternatives analysis, the Department will review the technical report referenced in Appendix D, I (D). The Department may consult with professionals, as necessary, in reviewing the report. The Department shall review the technical report to evaluate the impacts of the proposed project on water quality, instream flow, and aquatic habitat. The Department will develop guidelines for drafting the technical report and identifying issues to be addressed.

#### III. DIRECTOR'S DETERMINATION

(a) Upon completing its review of the written request and supporting information, the Director shall issue a draft determination. The Director's draft determination shall include a written statement setting out the reasons for the determination and provide a draft decision on the proposed project which shall either:

1) authorize, with conditions as necessary, the alteration of the habitat because the proposed project does not constitute a significant alteration of the habitat and no feasible alternatives exist to the proposed project; or

2) deny the request to alter the habitat because:

- (i) the proposed project constitutes a significant alteration of the habitat which is prohibited by Reg. 2.304(a); or
- (ii) feasible alternatives to the proposed project exist.

(b) Public notice, notice of a public comment period, and notice of any public hearing on the Director's draft determination shall be provided in the same manner as that provided for a draft permit decision in Regulation No. 8. Thereafter, the Director shall issue a final determination. The final determination shall be issued and notice provided in the same manner as that provided for the issuance and notice of a final permitting decision in Regulation No. 8. The Director's determination may be appealed to the Commission in the same manner as permit appeals are provided for in Regulation No. 8.

#### IV. REQUIREMENT FOR SHORT TERM ACTIVITY AUTHORIZATION

If the Director authorizes the alteration of the habitat of an extraordinary resource water, ecologically sensitive waterbody, or natural and scenic waterway, then the party requesting the Director's Determination shall submit to the Department a request for a short term activity authorization in accordance with the requirements of Reg. 2.305.

#### V. OTHER REQUIRED PERMITS NOT WAIVED

Nothing contained herein shall be construed to relieve the petitioner of the requirements to obtain any other permit for the proposed project required by state or federal law.

## Attachment C – Revisions to Regulation 2.3064

Reg. 2.306 Procedures for Removal of Any Designated Use Except Fishable/Swimmable, Extraordinary Resource Water, Ecologically Sensitive Waterbody, or Natural and Scenic Waterway, and Modification of Water Quality Criteria not Related to Fishable/Swimmable These Uses

This procedure is applicable in those cases where the Commission chooses to establish less stringent water quality criteria without affecting a fishable/swimmable use or the designated use of Extraordinary Resource Water or Ecologically Sensitive Waterbody or Natural and Scenic Waterway, or when the Commission chooses to remove a use other than fishable/swimmable which is not an existing use other than fishable/swimmable, Extraordinary Resource Water, Ecologically Sensitive Waterbody, or Natural and Scenic Waterway.

The Commission may allow a modification of the water quality criteria or the removal of a use which is not a fishable/swimmable use <u>or designated use of Extraordinary Resource Water or Ecologically Sensitive Waterbody or Natural and Scenic Waterway</u> to accommodate important economic or social development in a local area, if existing uses are maintained and protected fully and the requirements for public participation in the Continuing Planning Process are met. As a minimum, the following information shall be submitted to the Department Director before initiation of the public participation process:

- (A) Technological or economic limits of treatability.
- (B) Economic analysis of the impact on the local area.
- (C) Documentation that the use being removed is not an existing use and that all other designated uses will be protected.

Modifications made pursuant to this section may be required to be rejustified for continued support. As community water needs change, or technological advancement, including long-term environmental improvement projects, make treatment options more practicable, the Commission may reevaluate the need for the reestablishment of the more stringent water quality criteria or the removed use.

Any waterbody on which such alterations are approved will be so listed in Appendix A with the applicable changes noted.

<sup>&</sup>lt;sup>4</sup> Deletions are denoted by a line through the text and additions are denoted by underlined text. Comparison is from Arkansas Water Quality Standards (Regulation No. 2) version dated April 23, 2004 ("2004 Triennial Revision"), to version dated September 28, 2007 ("2007 Triennial Revision").

## Attachment D - New Regulation 2.310

- Reg. 2.310 Procedure for the Removal of the Designated Use of Extraordinary Resource Water, or Ecologically Sensitive Waterbody, or Natural and Scenic Waterway for the Purpose of Constructing a Reservoir on a Free Flowing Waterbody to Provide A Domestic Water Supply.
- (A) An extraordinary resource water, ecologically sensitive waterbody, or natural and scenic waterway designated use may be removed from a free flowing waterbody for the purpose of constructing a reservoir to provide a domestic water supply, if it can be demonstrated that:
  - (1) the sole purpose for the funding and construction of the reservoir is to provide a domestic water supply; and
  - (2) there is no feasible alternative to constructing a reservoir in order to meet the domestic water needs of the citizens of the State of Arkansas.

The limitation in Subsection A(1) of this section does not prohibit incidental uses of the reservoir that are consistent with the use of domestic water supply.

- (B) A petition to initiate rulemaking to remove an Extraordinary Resource Water, Ecologically Sensitive Waterbody, or Natural and Scenic Waterway designated use from a free flowing waterbody in order to construct a reservoir to provide a domestic water supply may be submitted to the Commission by a regional water distribution district, public facilities board, public water authority, or other public entity engaged in providing water to the public. Such petition, at a minimum, shall include:
  - (1) A map depicting the location of the proposed project and the area to be impounded;
  - (2) A description of the proposed project, including detailed design plans;
  - (3) A certification that the proposed structure to impound the free flowing stream shall be funded and constructed solely for the purpose of providing a domestic water supply:
  - (4) An evaluation of all alternatives to the proposed project, including:
    - (i) an environmental assessment of the impacts of each alternative on the instream and downstream water quality, the instream habitat, and the habitat and plant and animal life in the area upstream, downstream, and to be inundated by the proposed project;
    - (ii) the costs associated with, and an economic analysis for, each alternative;
    - (iii) an engineering analysis for each alternative; and
    - (iv) a socio-economic evaluation of the project to the local area and to the State as a whole; and
  - (5) Information and supporting documentation which address the criteria set forth in Appendix E;
  - (6) A recommendation to the Commission from the Director on whether or not the designated use should be maintained based upon a review of the information and supporting documentation required to be considered in Appendix E. The Director shall provide the petitioner with the Director's recommendation within 180 days of the Department's receipt of the petitioner's Appendix E submittal. If the Director does not deliver a recommendation to the petitioner within the 180

day time period, the petitioner may file its petition under this section without including a recommendation from the Director. The Director may submit a recommendation to the Commission at any time not less than 30 days prior to the Commission's final decision on the petition.

- (7) A description of any proposed mechanisms for protecting the domestic water supply, including but not limited to prohibitions to be placed on commercial and residential development along the proposed shoreline of the impoundment, the controls to be placed on public access to the water supply, and the legal authority for establishing and maintaining these domestic water supply protections; and
- (8) Any other submittals required by Regulation No. 8 for a petition to initiate rulemaking.
- (C) The Commission, as part of its rulemaking decision, shall determine whether or not a feasible alternative to constructing a reservoir is available to meet the domestic water needs of the citizens of the State of Arkansas. The Commission shall set forth the reasons for its determination in writing. The designated use of Extraordinary Resource Water, Ecologically Sensitive Waterbody, or Natural and Scenic Waterway shall not be removed by the Commission if a feasible alternative to constructing a reservoir is available to meet the domestic water needs of the citizens of the State of Arkansas.
- (D) The Commission, as part of its rulemaking, shall determine whether or not the sole purpose for the funding and construction of the reservoir is to provide a domestic water supply. The Commission shall set forth the reasons for its determination in writing. The designated use of Extraordinary Resource Water, Ecologically Sensitive Waterbody, or Natural and Scenic Waterway shall not be removed by the Commission if the purpose for the funding and construction of the reservoir is other than to provide a domestic water supply. In no circumstance, shall the designated use of Extraordinary Resource Water, Ecologically Sensitive Waterbody, or Natural and Scenic Waterway be removed by the Commission from a free flowing waterbody in order to construct a reservoir for recreational, flood control, or economic purposes other than providing a domestic water supply.
- (E) The Commission, as part of its rulemaking decision, shall determine whether or not the designated use of Extraordinary Resource Water, Ecologically Sensitive Waterbody, or Natural and Scenic Waterway of a given waterbody should be maintained. The Commission shall set forth the reasons for its determination in writing, after considering the Director's recommendation referenced in Subsection (B)(6) of this section and reviewing the information and supporting documentation which address the criteria set forth in Appendix E.

## Attachment E - New Appendix E

APPENDIX E: CRITERIA TO BE CONSIDERED IN DETERMINING WHETHER THE DESIGNATED USE OF EXTRAORDINARY RESOURCE WATER, ECOLOGICALLY SENSITIVE WATERBODY, OR NATURAL AND SCENIC WATERWAY SHOULD BE MAINTAINED

The determination of whether a designated use of Extraordinary Resource Water, Ecologically Sensitive Waterbody, or Natural and Scenic Waterway should be maintained in a given waterbody must be made on a case by case basis. At least 180 days prior to filing any petition authorized under Section 2.310 to initiate rulemaking with the Commission to remove the designated use of Extraordinary Resource Water, Ecologically Sensitive Waterbody, or Natural and Scenic Waterway from a free flowing waterbody for the purpose of constructing a reservoir to provide a domestic water supply, the petitioner shall submit to the Department information and supporting documentation which address each of the following:

- (A) Describe generally and specifically the state of the existing water quality,
- (B) Identify the presence of key and indicator species of fish adapted to flowing water systems and state the extent to which these species are present in the waterbody;
- (C) Describe the extent to which water quality and physical habitat, including wetlands, support other plant or animal life and identify the species;
- (D) Identify the presence of, and state the extent to which, other wildlife uses are dependent upon the waterbody;
- (E) State the extent to which water quality and physical habitat support threatened, endangered, or endemic aquatic or semi-aquatic species and identify those species;
- (F) Specify the extent to which the waterbody supports a high diversity of aquatic species and identify the presence and frequency of the species;
- (G) Describe and identify the extent to which physical or chemical characteristics of the waterbody provide an unusual or uncommon aquatic habitat;
- (H) Describe the extent to which physical or chemical characteristics give the waterbody unusual or unique aesthetic attributes;
- (I) Specify the extent of the use of the waterbody for recreation in or on the water, such as fishing, swimming, and boating (including but not limited to canoeing, kayaking, or rafting), or use of the waterbody for commercial activity, including tourism:
- (J) Identify and describe the intangible social values associated with the free flowing characteristics of the waterbody;
- (K) Identify the presence and location of gorges, rapids, waterfalls, or other significant geologic features;
- (L) Identify the presence and location of scenic areas and sites potentially impacted by the reservoir;
- (M) Identify the presence and location of rare and/or irreplaceable natural areas potentially impacted by the reservoir;
- (N) Identify the presence and location of known archeological sites potentially impacted by the reservoir;

- (O) Identify the presence and location of historic resources potentially impacted by the reservoir;
- (P) Delineate the extent to which the waterbody is located within the boundaries of, flows through, or is adjacent to state or federal forest land, parks, natural areas, nature preserves, refuges, or wildlife management areas;
- (Q) Describe the extent to which the waterbody is used for educational, scientific, or research purposes;
- (R) Identify the waterbody's use or potential use as an ecoregion reference stream;
- (S) Describe the land uses, and the geographical extent of each, occurring within the watershed:
- (T) Identify the presence and location of all permitted point sources discharging to the waterbody;
- (U) Identify the presence and location of existing alterations, diversions or manmade impoundments; and
- (V) Provide the frequency of occasions when there is no natural flow in the waterbody, and the 7Q10 flow values for the waterbody.

## Attachment F – New Regulation 2.311

- Reg. 2.311 Procedure for the Addition of the Designated Use of Extraordinary Resource Water, or Ecologically Sensitive Waterbody, or Natural and Scenic Waterway to a Waterbody or Segment of a Waterbody.
- (A) Any waters of the State may be nominated for designation as an Extraordinary Resource Water, Ecologically Sensitive Waterbody, or Natural and Scenic Waterway by submitting a petition to initiate rulemaking to the Arkansas Pollution Control and Ecology Commission. Such petition shall include, at a minimum, the following:
  - (1) Name of petitioner;
  - (2) Petitioner's mailing address and telephone number;
  - (3) Name and location description of the waterbody or segment proposed for designation:
  - (4) A map depicting the waterbody or segment proposed for designation,
  - (5) Petitioner's interest in the proposed action;
  - (6) Statement of potential benefits and impacts of the proposed action, including economic benefits and impacts;
  - (7) Evidence of requests for resolution(s) by appropriate local government(s) regarding the nomination of the waterbody as an Extraordinary Resource Water, Ecologically Sensitive Waterbody, or Natural and Scenic Waterway;
  - (8) Supporting documentation for the designation, including information which addresses the factors listed in Appendix F, I (A) through (P);
  - (9) Recommended language change necessary to affect this proposed change to any Commission regulation; and
  - (10) Any other submittals required by Regulation No. 8 for a petition to initiate rulemaking.
- (B) The Commission, as part of its rulemaking, shall set forth in writing the reasons for its final decision.

## Attachment G – New Appendix F

APPENDIX F: FACTORS CONSIDERED IN ADDING THE DESIGNATED USE OF EXTRAORDINARY RESOURCE WATER, ECOLOGICALLY SENSITIVE WATERBODY, OR NATURAL AND SCENIC WATERWAY TO A WATERBODY OR WATERBODY SEGMENT

The Commission shall consider the following supporting documentation in determining whether a waterbody should be designated as an Extraordinary Resource Water, Ecologically Sensitive Waterbody, or Natural and Scenic Waterway:

- (A) Location The waterbody is within the boundaries of or flows through or is adjacent to state or federal forest land, parks, natural areas, nature preserves, refuges, or wildlife management areas, or the watershed may include remote, primitive, or relatively undeveloped areas;
- (B) Existing water quality pristine, naturally-occurring, or unique;
- (C) Ecological value The presence of water quality and physical habitat that supports threatened, endangered, or sensitive species, the presence of any threatened, endangered, or sensitive species, and/or water quality that supports an exceptional high diversity of aquatic species (fish or benthic macroinvertebrates) as categorized by an appropriate index of biological integrity (IBI) protocol;
- (D) Presence of physical or chemical characteristics that provide an unusual or uncommon aquatic habitat;
- (E) Special attributes of the waterbody that make it an outstanding resource, including but not limited to the presence of archeological sites, historical sites, or rare or valuable wildlife habitat:
- (F) Aesthetic Value- the presence of scenic areas or sites or scenic beauty resulting from natural features of the basin such as flow, topography, geology, ecology, physiography (i.e., waterfalls, gorges, rapids, or other special features), or the presence of characteristics giving the waterbody unique or unusual attributes:
- (G) Recreational Value- Use of the waterbody for:
  - (1) Fishing, rafting, kayaking, camping, family outings, backpacking, bird watching, etc.,
  - (2) Presence of hiking trails or scenic road or highway alongside, and
  - (3) Attracting tourism;
- (H) Use of the waterbody for educational, scientific, or research purposes;
- (I) Presence of rare and/or irreplaceable natural areas; and
- (J) Impacts the designation may have on current uses, upstream users, downstream users, and potential future uses of the waterbody or waterbody segment.