

OKLAHOMA WATER RESOURCES BOARD

RULE IMPACT STATEMENT

for Rule Amendments in OAC 785:45
Proposed or Considered for Adoption during 2015

A. A BRIEF DESCRIPTION OF THE PURPOSE OF THE PROPOSED RULES.

Oklahoma Water Resources Board (OWRB) staff are proposing to amend provisions of the Oklahoma Water Quality Standards (OWQS) codified in Oklahoma Administrative Code (OAC) 785:45 as presented below.

Technical documentation supporting the proposed amendments/rules outlined below is posted on the OWRB website (http://www.owrb.ok.gov/util/rules/wqs_revisions.php). The OWRB hosted informal public meetings to discuss the proposed amendments on October 8, 2014 and October 28, 2014. During and since these meetings, OWRB staff received a limited amount of specific information/comments regarding the proposed rules and subjects B through J below. However, in all cases OWRB staff worked to be responsive to the comments/information received from both other state environmental agencies and or interested parties. In the absence of specific information from other state environmental agencies and or interested parties, OWRB staff evaluated subjects B through J in a broad manner.

Proposed Wetland Water Quality Standards

Amendments are proposed regarding water quality standards (WQS) applicable to wetland waterbodies. The definition section (OAC 785:45-1-2.) is proposed to be amended to include definitions for the terms "Wetland" and "Ecological Integrity". Additionally, a new subsection (OAC 785:45-5-21. Wetland Beneficial Uses and Criteria) is proposed and will contain beneficial uses and criteria applicable to wetland waterbodies. The proposed wetland WQS include provisions to address mixing zones and zones of passage specific for wetland waterbodies; the proposed language is located in OAC 785:45-5-26. Finally, a new subsection (OAC 785:45-5-30. Additional Provisions) is proposed and will add provisions found in other state and federal statutes related to water quality standards. This addition will ensure consistency between these other statutes and water quality standards.

The purpose of the proposed rules is to provide scientifically sound water quality standards applicable to Oklahoma's wetland waterbodies. Currently, default WQS apply to wetlands; however, the default water quality standards were developed for streams and lakes and in many cases are not suitable for wetlands. As a result, the default WQS are sometimes overly stringent and may erroneously identify healthy wetlands as wetlands in poor condition. The proposed wetland WQS would replace the default WQS currently applicable to wetlands.

Proposed Dissolved Oxygen Criteria Revisions

Amendments are proposed to clarify the dissolved oxygen criteria. The proposed amendments include, striking the use support assessment language found in OAC 785:45-5-12 (f)(1)(D) and modifying OAC 785:45-5-12(f)(1)(C) to include (i) and (ii), which will retain the provisions that pertain to acute dissolved oxygen events. Additionally, it is proposed to revoke and reenact Table 1 of Appendix G with two new footnotes, which clarify how the 10% exceedance

frequency shall be applied and specify where the Warm Water Aquatic Community (WWAC) dissolved oxygen criteria apply in lakes.

The purpose of the proposed rules is to eliminate confusion caused by having use support assessment language from OAC 785:46 duplicated in OAC 785:45; the proposed rule would strike the duplicative language. Moreover, the proposed rule would clarify how and where components of the existing dissolved oxygen criteria are applied. The purpose of this proposed rule is to eliminate ambiguity that may cause problems during the use support assessment process.

Proposed Water Effect Ratio & Dissolved Translator for Copper & Zinc

Requirements for Development of Site Specific Criteria for Certain Parameters (OAC 785:45 Appendix E) is proposed to be revoked and reenacted with the addition of a site specific Water Effect Ratio (WER) and dissolved translator for copper and zinc applicable to the Broken Bow Public Works Authority OPDES permit for discharges of municipal and industrial wastewater to a tributary of Yanubbe Creek. The site specific copper and zinc WER and dissolved translator may be used in calculating permit limits for copper and zinc.

The purpose of the proposed rule is to provide criteria adjustment factors (i.e WER and dissolved translator) which account for the effects of site specific water characteristics on pollutant bioavailability and toxicity to aquatic life. The criteria adjustment factors (WER and dissolved translator) will result in relaxed copper and zinc permit limits for the Broken Bow Public Works Authority and provide consistently attainable permit limits that also fully protect aquatic life and provide an equivalent level of water quality protection as the statewide criteria.

B. A DESCRIPTION OF THE CLASSES OF PERSONS WHO MOST LIKELY WILL BE AFFECTED BY THE PROPOSED RULES, INCLUDING CLASSES THAT WILL BEAR THE COSTS OF THE PROPOSED RULES, AND ANY INFORMATION ON COST IMPACTS RECEIVED BY THE AGENCY FROM ANY PRIVATE OR PUBLIC ENTITIES.

Proposed Wetland Water Quality Standards

The classes of persons mostly likely to be affected by the proposed rules are members of the regulated community required to obtain a 401 Water Quality Certification and or an OPDES permit for discharges to wetlands from the Oklahoma Department of Environmental Quality (ODEQ). As with all WQS, the proposed wetland WQS will be implemented through various water quality programs and two key programs are 401 Water Quality Certification and OPDES permitting. Although, it is important to note that currently the default WQS are applicable to wetland waterbodies and there are regulatory responsibilities related to the default WQS. However, as stated above sometimes these standards can be overly stringent and or not suitable with respect the wetlands and the proposed wetland WQS would replace the default WQS for wetlands. It is not anticipated that implementation costs associated with the proposed wetland WQS would significantly differ from current costs. The proposed rules do not create wholly new regulatory responsibilities with associated costs.

OWRB did not receive any cost information from any private or public entity.

Proposed Dissolved Oxygen Criteria Revisions

The classes of persons mostly likely to be affected by the proposed rules are those state agencies that conduct water quality assessments to determine the attainment or nonattainment of beneficial uses. Additionally, other groups, such as universities, that utilize the state's WQS to evaluate water quality data will be affected. The impact of the proposed dissolved oxygen criteria revisions will be beneficial because the proposed revision serves to clarify the application of the existing dissolved oxygen criteria.

The proposed revision clarifies the existing dissolved oxygen criteria; there are no expected costs as a result of this revision. OWRB did not receive any cost information from any private or public entity.

Proposed Water Effect Ratio & Dissolved Translator for Copper & Zinc

The class of persons affected by this proposed rule is the Broken Bow Public Works Authority. The proposed water effect ratio and dissolved translators for copper and zinc were developed for the Broken Bow Public Works Authority and will assist them in maintaining compliance with their OPDES permit. The proposed rule will benefit the Broken Bow Public Works Authority because by using criteria adjustment factors such as, a water effects ratio and dissolved translator they will avoid cost associated with treatment upgrades.

OWRB did not receive any cost information from any private or public entity.

C. A DESCRIPTION OF THE CLASSES OF PERSONS WHO WILL BENEFIT FROM THE PROPOSED RULES.

Proposed Wetland Water Quality Standards

The class of persons who will benefit from the proposed rules include the regulated community because the proposed rules will provide regulatory relief and clarity by replacing sometimes overly stringent default WQS with scientifically sound WQS suitable for wetland waterbodies. Additionally, Oklahoma residents and recreational visitors will benefit from sustaining and protecting wetland waterbodies with WQS. Wetlands are a unique waterbody type that are extremely biologically productive, diverse, and provide rich habitat for fish, amphibians, and wildlife. Wetlands are often popular recreation areas to enjoy outdoor activities like hunting, fishing, and bird watching. Wetlands also serve an important role on the landscape in storing floodwater, preventing erosion, and filtering water.

The Oklahoma Department of Wildlife Conservations provided the following information on the classes of persons who will benefit from the proposed rules.

- Wildlife/nature enthusiasts will benefit from protected/improved wetland areas in which to actively and passively use the resource.
- Cities will benefit from the filtering effect of working wetlands which should reduce the amount of treatment needed, groundwater users will also benefit from the filtering effect of wetlands.
- Landowners will benefit from the flood attenuation action of working wetlands.

- Various State departments, cities, and businesses will benefit from increased tourism and the associated spending

Proposed Dissolved Oxygen Criteria Revisions

The classes of persons who will benefit from the proposed rules are primarily staff of state environmental agencies that conduct water quality assessments to determine the attainment or nonattainment of beneficial uses. The proposed rule will benefit agency staff because it serves to clarify the dissolved oxygen criteria and will support consistent and correct dissolved oxygen water quality assessments. This will subsequently benefit the regulated community because the state will consistently and correctly identify waterbodies in need of additional protection and or further regulatory action.

Proposed Water Effect Ratio & Dissolved Translator for Copper & Zinc

The Broken Bow Public Works Authority will benefit from this proposed rule. The proposed water effect ratios and dissolved translators for copper and zinc were developed for the Broken Bow Public Works Authority and will assist them in maintaining compliance with their OPDES permit.

D. A DESCRIPTION OF THE PROBABLE ECONOMIC IMPACT OF THE PROPOSED RULES UPON AFFECTED CLASSES OF PERSONS OR POLITICAL SUBDIVISIONS, INCLUDING A LISTING OF ALL FEE CHANGES AND, WHENEVER POSSIBLE, A SEPARATE JUSTIFICATION FOR EACH FEE CHANGE.

Proposed Wetland Water Quality Standards

OWRB staff did not receive any information from affected persons, political subdivisions, or other state agencies regarding the probable economic impact of the proposed rules. However, political subdivisions such as, counties and or municipalities and or persons that are required to obtain 401 Water Quality Certification and or an OPDES permit for discharges to a wetland may be economically impacted as the proposed wetland WQS would be implemented through these programs and it is reasonable to expect there would be compliance responsibilities associated with these programs. Although, it is important to note that currently the default WQS are applicable to wetland waterbodies and there are regulatory responsibilities related to the default WQS. Thus, the proposed rules do not create wholly new regulatory responsibilities or associated costs. Moreover, as stated above sometimes the default standards can be overly stringent and or not suitable with respect the wetlands and the proposed wetland WQS would replace the default WQS for wetlands.

Additionally, sustaining wetlands on the landscape also provides a positive economic impact. For example, wetland's natural filtration processes can improve waters making them healthier sources of drinking water and reducing drinking water treatment costs. Wetlands also play an important role in reducing the frequency and intensity of flood waters by acting as natural buffers. By helping to manage flood flows wetlands help to mitigate costs associated with flood damage.

There are no fee changes included in the proposed rules.

Proposed Dissolved Oxygen Criteria Revisions

The proposed revision clarifies the existing dissolved oxygen criteria it does not change the criteria; the proposed rule is not expected to cause an economic impact on affected persons or political subdivisions.

OWRB staff did not receive any information from affected persons, political subdivisions, or other state agencies regarding the probable economic impact of the proposed rules.

There are no fee changes included in the proposed rules.

Proposed Water Effect Ratio & Dissolved Translator for Copper & Zinc

This proposed rule will affect the Broken Bow Public Works Authority. The proposed water effect ratio and dissolved translators for copper and zinc were developed for the Broken Bow Public Works Authority and will assist them in maintaining compliance with their OPDES permit. The proposed rule will economically benefit the Broken Bow Public Works Authority because by using criteria adjustment factors such as, a water effects ratio and dissolved translator they will avoid cost associated with treatment upgrades.

OWRB staff did not receive any information from affected persons, political subdivisions, or other state agencies regarding the probable economic impact of the proposed rules.

There are no fee changes included in the proposed rules.

E. THE PROBABLE COSTS AND BENEFITS TO THE AGENCY AND TO ANY OTHER AGENCY OF THE IMPLEMENTATION AND ENFORCEMENT OF THE PROPOSED RULES, THE SOURCE OF REVENUE TO BE USED FOR IMPLEMENTATION AND ENFORCEMENT OF THE PROPOSED RULES, AND ANY ANTICIPATED EFFECT ON STATE REVENUES, INCLUDING A PROJECTED NET LOSS OR GAIN IN STATE REVENUES IF IT CAN BE PROJECTED BY THE AGENCY.

Proposed Wetland Water Quality Standards

Oklahoma's state environmental agencies, including OWRB, currently implement and or enforce all water quality standards through existing programs under their respective jurisdictions. The proposed rules do not create any new implementation programs. It is expected that state agencies will utilize the proposed wetland WQS in established implementation programs instead of the default WQS, which are currently in place for wetlands. It is not expected that this will cause agencies to bear substantial additional costs to implement and or enforce the proposed standards. OWRB did not receive any information on probable costs and benefits to implement and enforce the proposed rules from any agency.

It may be necessary in the future for the OWRB to conduct additional rulemaking to adopt general implementation procedures related to the proposed rules. In this case, some additional costs will be borne by the OWRB. However, this potential rulemaking action would provide an

overall benefit to OWRB, other state agencies, the regulated community by proving a transparent and consistent approach to implementing wetland WQS.

The proposed rules are not expected to have any effect on state revenues.

Proposed Dissolved Oxygen Criteria Revisions

This proposed revision clarifies the existing dissolved oxygen criteria and it is not expected that the proposed rule will require any agency to modify their implementation and or enforcement activities. It is not expected that this clarification will generate any cost or benefit for any state agency.

The proposed rules are not expected to have any effect on state revenues.

Proposed Water Effect Ratio & Dissolved Translator for Copper & Zinc

The proposed rule will provide criteria adjustment factors that can be used when determining OPDES permit limits for the Broken Bow Public Works Authority. This proposed rule will not create any new implementation or enforcement responsibilities for the ODEQ; thus, the agency is not expected to incur any new costs or benefits related to this proposed rule.

The proposed rules are not expected to have any effect on state revenues.

F. A DETERMINATION OF WHETHER IMPLEMENTATION OF THE PROPOSED RULES WILL HAVE AN ECONOMIC IMPACT ON ANY POLITICAL SUBDIVISIONS OR REQUIRE THEIR COOPERATION IN IMPLEMENTING OR ENFORCING THE RULES.

Political subdivisions are not expected to have implementation or enforcement responsibilities associated with the proposed rules; however, through various regulatory programs it is likely they may compliance responsibilities and cooperation would be beneficial.

Political subdivisions such as, counties and or municipalities that are required to obtain 401 Water Quality Certification and or an OPDES permit for discharges to a wetland may have an economic impact as the proposed wetland WQS would be implemented through these programs and it is reasonable to expect there would be compliance responsibilities associated with these programs. Although, it is important to note that currently the default WQS are applicable to wetland waterbodies and there are regulatory responsibilities related to the default WQS. Thus, the proposed rules do not create wholly new regulatory responsibilities. Moreover, as stated above sometimes the default standards can be overly stringent and or not suitable with respect the wetlands and the proposed wetland WQS would replace the default WQS for wetlands.

Additionally, sustaining wetlands on the landscape also provides a positive economic impact. For example, wetland's natural filtration processes can improve waters making them healthier sources of drinking water and reducing drinking water treatment costs. Wetlands also play an important role in reducing the frequency and intensity of flood waters by acting as natural buffers. By helping to manage flood flows wetlands help to mitigate costs associated with flood damage.

Proposed Dissolved Oxygen Criteria Revisions

Political subdivisions are not expected to have implementation or enforcement responsibilities associated with the proposed rules. The proposed revision clarifies the existing dissolved oxygen criteria it does not change the criteria; the proposed rule is not expected to change the implementation or enforcement of the dissolved oxygen criteria.

Proposed Water Effect Ratio & Dissolved Translator for Copper & Zinc

The proposed rule will provide criteria adjustment factors that can be used when determining OPDES permit limits for the Broken Bow Public Works Authority. The Broken Bow Public Works Authority will not have implementation or enforcement responsibilities under this proposed rule; however, they will continue to have compliance responsibilities as part of their OPDES permit. This proposed rule will benefit the Broken Bow Public Works Authority because it will assist them in maintaining compliance with their permit.

G. A DETERMINATION OF WHETHER IMPLEMENTATION OF THE PROPOSED RULES MAY HAVE AN ADVERSE ECONOMIC EFFECT ON SMALL BUSINESS AS PROVIDED BY THE OKLAHOMA SMALL BUSINESS REGULATORY FLEXIBILITY ACT.

Proposed Wetland Water Quality Standards

It is possible that there may be an adverse economic effect on small businesses (defined in 75 O.S. § 502) if the small business is required to obtain 401 Water Quality Certification and or an OPDES permit for discharges to a wetland. The proposed wetland WQS will be implemented through these programs and it is reasonable to expect there would be compliance responsibilities associated with these programs. Although, it is important to note that currently the default WQS are applicable to wetland waterbodies and there are regulatory responsibilities related to the default WQS. Thus, the proposed rules do not create wholly new regulatory responsibilities or associated costs. Moreover, sometimes the default standards can be overly stringent and or not suitable with respect the wetlands. The proposed wetland WQS would replace the default WQS for wetlands and provide regulatory relief and clarity.

Proposed Dissolved Oxygen Criteria Revisions

The proposed revisions to the dissolved oxygen criteria are not expected to have an adverse economic effect on small business (defined in 75 O.S. § 502). The proposed revision clarifies the existing dissolved oxygen criteria it does not change the criteria and will not create additional costs for any small business.

Proposed Water Effect Ratio & Dissolved Translator for Copper & Zinc

The proposed site specific Water Effect Ratio and dissolved translator for copper and zinc are applicable to the Broken Bow Public Works Authority OPDES permit for discharges of municipal and industrial wastewater. Because this revision is site specific and only applicable to an individual discharge it is not expected to result in any adverse economic effect on small business (defined 75 O.S. § 502).

H. AN EXPLANATION OF THE MEASURES THE AGENCY HAS TAKEN TO MINIMIZE COMPLIANCE COSTS AND A DETERMINATION OF WHETHER THERE ARE LESS COSTLY OR NONREGULATORY METHODS OR LESS INTRUSIVE METHODS FOR ACHIEVING THE PURPOSE OF THE PROPOSED RULES.

Proposed Wetland Water Quality Standards

The proposed rules would replace the existing default water quality standards that currently apply to wetland waterbodies. Currently, there are regulatory responsibilities related to the default WQS and it is not anticipated that compliance cost associated with the proposed wetland WQS would significantly differ from current compliance cost. In fact, in some cases the default WQS are overly stringent for wetland waterbodies and therefore the proposed rules will provide regulatory relief.

Oklahoma's state environmental agencies currently implement all water quality standards through existing regulatory programs under their respective jurisdictions. The proposed rules do not create any new regulatory programs

OWRB staff did not receive any expected compliance cost information from other state agencies and or interested parties.

Proposed Dissolved Oxygen Criteria Revisions

The proposed revisions to the dissolved oxygen criteria work to clarify the existing dissolved oxygen criteria it does not change the criteria. This proposed revision will not have any associated compliance cost.

Proposed Water Effect Ratio & Dissolved Translator for Copper & Zinc

The proposed rule will provide criteria adjustment factors that can be used when determining OPDES permit limits for the Broken Bow Public Works Authority. The criteria adjustment factors (WER and dissolved translator) will result in relaxed copper and zinc permit limits for the Broken Bow Public Works Authority and provide consistently attainable permit limits that also fully protect aquatic life and provide an equivalent level of water quality protection as the statewide criteria. The approach of employing site specific criteria adjustment factors serves to minimize compliance cost as compared to alternative actions such as, as treatment upgrades.

I. A DETERMINATION OF THE EFFECT OF THE PROPOSED RULES ON THE PUBLIC HEALTH, SAFETY AND ENVIRONMENT AND, IF THE PROPOSED RULES ARE DESIGNED TO REDUCE SIGNIFICANT RISKS TO THE PUBLIC HEALTH, SAFETY AND ENVIRONMENT, AN EXPLANATION OF THE NATURE OF THE RISK AND TO WHAT EXTENT THE PROPOSED RULES WILL REDUCE THE RISK.

Proposed Wetland Water Quality Standards

Wetlands are a unique waterbody type that are extremely biologically productive, diverse, and provide rich habitat for fish, amphibians, and wildlife. Wetlands are often popular recreation areas for people to enjoy outdoor activities like hunting, fishing, and bird watching. Wetlands also serve an important role on the landscape in storing floodwater, preventing erosion, and filtering water. Oklahoma has lost 67% of historic wetland areas; it is important that the remaining 33 % be sustained. The proposed wetland WQS will help improve and maintain the state's wetlands by providing a benchmark against which to assess condition, plan preservation, mitigation, and or restoration activities.

At the same time, the proposed rules provide a scientifically sound foundation for the state's wetland programs and regulatory relief by providing clarity for the regulated community.

Proposed Dissolved Oxygen Criteria Revisions

The proposed revisions to the dissolved oxygen criteria work to clarify the existing dissolved oxygen criteria it does not change the criteria; therefore, this rule would not have a direct effect on public health, safety or the environment. The objective and benefit of the proposed rule is that it serves to clarify the dissolved oxygen criteria, which will facilitate agency staff in making consistent and correct dissolved oxygen water quality assessments.

Proposed Water Effect Ratio & Dissolved Translator for Copper & Zinc

The purpose of the proposed rule is to provide criteria adjustment factors (WER and dissolved translator) which account for the effects of site specific water characteristics on pollutant bioavailability and toxicity to aquatic life. The criteria adjustment factors (WER and dissolved translator) will result in relaxed copper and zinc permit limits for the Broken Bow Public Works Authority; however, the adjusted criteria will continue to fully protect aquatic life and provide an equivalent level of water quality protection as the statewide criteria. The proposed rule is not expected to have a negative effect on public health, safety or the environment.

J. A DETERMINATION OF ANY DETRIMENTAL EFFECT ON THE PUBLIC HEALTH, SAFETY AND ENVIRONMENT IF THE PROPOSED RULES ARE NOT IMPLEMENTED.

Proposed Wetland Water Quality Standards

If the proposed wetland WQS are not implemented the default WQS will still be in place and provide nonspecific protection for wetlands and some cases are overly stringent standards. Because the default WQS are often not suitable for wetlands they have proven problematic to implement and as a result wetland protection may be minimized and or misapplied within the state's water quality programs.

Proposed Dissolved Oxygen Criteria Revisions

The proposed revisions to the dissolved oxygen criteria work to clarify the existing dissolved oxygen criteria it does not change the criteria; therefore, there are no anticipated adverse effects to public health, safety or the environment if the proposed rules are not implemented.

Proposed Water Effect Ratio & Dissolved Translator for Copper & Zinc

The proposed rule provides site specific criteria adjustment factors (WER and dissolved translator) for the Broken Bow Public Works Authority. Without this proposed rule the statewide criteria for copper and zinc will remain in place for aquatic life protection. There are no anticipated adverse effects to public health, safety or the environment if the proposed rules are not implemented.

K. THE DATE THE RULE IMPACT STATEMENT WAS PREPARED AND IF MODIFIED, THE DATE MODIFIED:

This rule impact statement was prepared and approved on December 1, 2014 by Jason Childress, Section Head, Water Quality Standards Section, Water Quality Programs Division, Oklahoma Water Resources Board.