

RESPONSIVENESS SUMMARY

Triennial Review 2012-2014

**Prepared by the
Iowa Department of Natural Resources
February 9, 2012**

TABLE OF CONTENTS

SECTION	Page
INTRODUCTION	1
PUBLIC AND STAKEHOLDER RESPONSES TO THE DRAFT WORK PLAN	5
Iowa Environmental Council	5
Iowa Farm Bureau Federation (Farm Bureau)	7
United States Environmental Protection Agency (EPA)	11
RECOMMENDATIONS	13
TABLES	
Table 1 – Triennial Review Action Items	1
Table 2 – Ongoing Workload of DNR Water Quality Standards Program	3
APPENDICES	
Appendix A – Estimated Work Schedule from Work Plan	Appendix 1

Introduction

This is a summary of comments received in response to the *DRAFT Triennial Review Process Summary and Work Plan 2012-2014* dated October 3, 2011 (hereinafter referred to as 'Draft Work Plan'). The Draft Work Plan described the Triennial Review Process, an every-three-year review of a state's Water Quality Standards as set forth in the Clean Water Act. It walked through the steps in the process, the feedback and discussions of public and stakeholder participants in the process, and detailed the results of that process. These results are the proposed action items that the Iowa Department of Natural Resources (DNR) and an issue-specific technical advisory committee (TAC) will study. These groups will determine what the extent of the issue of concern is, what new information is available, and what might be options available to address each concern. It should be noted here that there will be ample opportunities for feedback and contributions from the public and stakeholders all throughout this process.

The areas included in the Draft Work Plan to be reviewed include the following:

TABLE 1 – TRIENNIAL REVIEW ACTION ITEMS
1. Metals criteria
2. Lake and wetland designated uses
3. Cold water streams
4. Antidegradation

1. Metals Criteria – There are several issues included with metals criteria. The first issue includes taking a look at the use of total recoverable methods versus total dissolved. Different entities inside and outside the agency that work directly or indirectly with the Water Quality Standards use one or the other of the methods. There are advantages and disadvantages to each method, but it is generally believed that the total dissolved method would present a more accurate picture as to what is actually in the water and ultimately, how impaired a stream might be. Considering that Water Quality Standards and other programs use total recoverable, it is necessary to understand what the impacts might be in changing the standards to accommodate this.

A second issue identified to take a closer look at is the arsenic criterion. There are different values for the Human Health criteria under 304(a) (0.18 ug/L) versus the Safe Drinking Water Act (SDWA) requirements (10 ug/L – applied at the tap). Method detection levels (MDLs) have also gotten so precise that this naturally-occurring compound is being detected and can lead to listing as impaired.

The third specific issue being looked at in this area is copper. Since the DNR established its previous copper criterion, the EPA has since published new criteria, and which also use a new approach called the Biotic Ligand Model. This compound is also naturally-occurring and leads to potential impairments when it is detected with low method detection limits.

2. Lake and wetland designated uses – Lakes and wetlands are distinctly different in how they handle certain chemical parameters, such as dissolved oxygen and nutrients. It is important to understand the differences and account for these in the standards.
3. Cold water streams – A number of larger cold water streams (CW1) were designated in the standards; however, the smaller cold water streams (CW2) were not populated, nor was criteria established for them in rule.
4. Antidegradation – Antidegradation was a new procedure when it was publicized in the Antidegradation Implementation Procedure of February 2010. This procedure will be studied again later in year two of the 2012 to 2014 Triennial Review period to see how it has been applied, how it is working, what areas might be improved after a period of practical use.

For a more detailed discussion on the ongoing issues surrounding these topics, please refer to the Draft Work Plan.

Along with the Triennial Review Action items, the Draft Work Plan also included a discussion on ongoing workload of the DNR'S Water Quality Standards program.

TABLE 2 – ONGOING WORKLOAD OF DNR WATER QUALITY STANDARDS PROGRAM
1. Nutrients
2. Use Assessment and Use Attainability Analyses (UAAs)
3. Waste Load Allocation Procedure (WLAP)

1. Nutrients – An interagency effort to develop a statewide nutrient strategy was developed in October of 2010, with the effort divided into two separate parts: a nonpoint source component and a point source component. The Iowa Department of Agriculture and Land Stewardship (IDALS) and the Iowa State University (ISU) College of Agriculture are leading the effort to develop the nonpoint source component of the statewide nutrient strategy. As part of that effort, IDALS has convened an interagency committee of researchers to review the science of different nutrient reduction strategies from nonpoint sources, and a separate committee has convened to discuss ways to provide outreach to the public about various nonpoint source nutrient reduction strategies. A webpage devoted to providing information to the public on these issues has been established through Iowa State University, below:

<http://www.ag.iastate.edu/nutrientstrategy/>

The point source component of the statewide nutrient reduction strategy is being led by the DNR's Water Quality Bureau, which regulates point source discharges in Iowa. As part of this effort, DNR is leading an interagency task force to review and develop nutrient reduction strategies from point sources. Strategy development is expected to be completed in 2012.

2. Use Assessment and Use Attainability Analyses (UAAs) - Use Assessment and Use Attainability Analyses (UAAs) are performed to designate the recreational and aquatic uses of a stream. That information is then used in the National Pollutant Discharge Elimination System (NPDES) permitting, as part of the total maximum daily load (TMDL) determinations, and evaluation of watershed impairments. The number of facilities requiring these permits has been reduced, but many still remain, and new ones are created, so these assessments continue.
3. Waste Load Allocation Procedure (WLAP) - Formerly known as the Basin Support Document, this procedure manual contains the more specific guidance on how the Water Quality Standards are implemented. The guidance was in need of an update to incorporate new

information and clarify new policies. This work has been ongoing for the last couple of years, and is now in the early stages of the rulemaking stages. That will continue into the first portion of the Triennial Review Period.

Please also refer to the Draft Work Plan for a more detailed discussion on these activities.

The Draft Work Plan also included an estimated schedule for the proposed action items and existing work load. Based on public comments and current status of activities in the department, changes have been made to the work plan. A copy of the schedule showing changes is included in Appendix A.

Public and Stakeholder Responses to the Draft Work Plan

The Draft Work Plan was posted on DNR's website on October 18, 2011, with a ListServ notification announcement on October 19, 2011, with a request for feedback from the public by October 31, 2011. The DNR received three comment letters from three different entities:

1. Iowa Environmental Council (IEC)
2. Iowa Farm Bureau Federation (Farm Bureau)
3. United States Environmental Protection Agency (EPA)

Each of these comment letters and the follow up responses to them will be discussed in the following sections.

Iowa Environmental Council

Commenter:

"Adoption of numeric nutrient criteria for lakes and rivers/streams is a high priority for the Iowa Environmental Council and we are concerned about the Work Plan's description of the Department's ongoing commitment to adopt numeric nutrient criteria for lakes and rivers/streams. The adoption of numeric nutrient criteria was discussed during the June 29th Technical Advisory Committee (TAC) meeting as an ongoing DNR water quality standards priority. However the nutrient section of the triennial review summary (section A of under existing/ongoing projects) only refers to the DNR commitment to develop a comprehensive nutrient strategy without any mention of a commitment to adopt numeric nutrient criteria as part of that strategy. We request that the DNR's ongoing efforts to adopt numeric nutrient criteria for lakes and river/streams as part of the comprehensive nutrient strategy be added to this section.

"The Estimated Work Schedule (Table 8) does include a schedule for the ongoing stream nutrient criteria TAC and eventual stakeholder meetings - with initiation of rulemaking scheduled for the fourth quarter of 2014. However, there is nothing on the schedule regarding re-initiation of rulemaking to adopt nutrient criteria for lakes. At the time of the June 29th TAC meeting proposed rules for nutrient criteria for swimming lakes were in progress, but that rulemaking expired in September without final adoption by the Environmental Protection Commission. The Council has discussed our disappointment about the expiration of these important rules with DNR Environmental Services Division Chief, Bill Ehm, and have been assured that DNR plans to re-initiate rulemaking on the lake criteria early in 2012. We request that the DNR proposed schedule for adoption of nutrient criteria for lakes be added to Table 8."

DNR Response:

Issue 1 - Concern about DNR's ongoing commitment to adopt numeric nutrient criteria for lakes and rivers/streams.

How to address nutrients has been, and continues to be, a significant concern in Iowa. As discussed IDALS and DNR are working together with numerous other agencies and organizations in development of an overall Nutrient Strategy program. DNR's overall involvement in that Nutrient Strategy team was just taking shape at the time the DRAFT Work Plan was being prepared. Several months have now passed, and there is more definition on what the joint approach might look like. IDALS will take the lead on working with the nonpoint source aspects, and DNR with the point source issues.

Since that interagency effort is already going on separately from the Triennial Review process, this is an area that will not be directly included in the Triennial Review process. It will be the work of that Nutrient Strategy team to evaluate how to address nutrient management and numeric nutrient criteria.

The DNR's contact person for this Nutrient Strategy team is Adam Schnieders:

Adam Schnieders
NPDES Supervisor
Iowa Department of Natural Resources
502 East Ninth Street
Des Moines, IA 50319
515-281-7409
Adam.schnieders@dnr.iowa.gov

Issue 2 - Expiration of Lake Criteria

While the original rulemaking approach for addressing nutrients in Iowa Lakes was allowed to expire, nutrients in lakes and waters of the state and of the US continue to be a priority concern to DNR. As discussed in previous sections, nutrients will be addressed through an interagency effort. For more information on lakes and nutrients, please contact Adam Schnieders, the contact person for the Nutrient Strategy team. His contact information is listed above in Issue 1.

Issue 3 - Request to include proposed schedule for adoption of nutrient criteria for lakes to be added to Table 8.

As Nutrients are being addressed through a broader, interagency effort, the project goals and schedules will not be included under direct Triennial Review management. Work on these issues is being conducted as presented in the previous sections, and you may contact Adam Schnieders, the contact person for the Nutrient Strategy team, for more information.

Iowa Farm Bureau Federation (Farm Bureau)

Commenter:

"The topic areas identified in the work plan are issues worthy of continued discussion or are areas that need to be improved in our current water quality standards. We would like to see changes made in two areas of the work plan. First, the elimination of the rebuttable presumption should be included in the work plan for reasons specified below. Second, we are concerned about the present make-up and direction of the stream nutrient advisory committee. We believe this effort should be wrapped into the development of the strategic plan for nutrients rather than a separate isolated effort.

The presumption contained in Iowa Admin. Code 61.3(1)(b) assumes that all perennial streams are capable of supporting full contact recreation and game fishing. The utility of the rebuttable presumption has greatly diminished with the adoption of use designations by rule for most of the stream segments with point source permit discharges. The benefits of the presumption no longer outweigh the disadvantages. The presumption was originally adopted in order to provide protection to those streams that hadn't been individually designated but received were point source discharge. These streams have now been designated for the most part, so the benefit is greatly diminished if not eliminated.

The presumption continues to be a disadvantage to the state's growth potential and to be the judicious use of state resources. The effect of the presumption on smaller streams would be to have them declared "impaired" unjustifiably in some instances since an improper standard would be applied when there is monitoring data. The media coverage of the impaired waters list is itself damaging so resolution of this problem through the TMDL process is an inadequate remedy and inefficient use of state resources. Sources located on nondesignated streams are

at a great disadvantage to those sources located along already designated streams because of the presumption. The alternatives of more stringent permit limits (subject to anti-backsliding), or permit delays from preparing a use attainability analysis are insufficient alternatives.

The presumption is no longer scientifically justifiable for many of the remaining smaller streams that have not yet been designated. It also creates a cloud of uncertainty about what is considered to be perennial or intermittent given the inconsistent application of the terms during the previous administration's use designation process. Streams with enough flow only during high precipitation periods, are not be considered perennial under Iowa's rules, yet some were designated. The USGS map designations have been found to be inaccurate during the site investigations conducted so far, yet they remain in the rule. The presumption has also created difficulties with obtaining EPA approval when the appropriate uses are finally designated. Eliminating the presumption or clarifying that all undesignated segments are not included, would create better clarity of what standards apply to these smaller undesignated streams or channels.

In the proposed work plan timeline, the stream nutrient technical advisory committee is scheduled to continue its work. This effort, on its present course, seems inconsistent with the approach of developing and implementing a comprehensive nutrient strategy to achieve progress on nutrients. We support acting to find and implement solutions for nutrients; however, unless significant changes are made in its structure and focus, this committee is counterproductive to this effort. As presently structured, it was given the task of developing numeric nutrient standards for streams. We are concerned that this singular focus will result in committee recommendations with insufficient scientific justification. The committee's task has been to come up with recommended standards rather than to review the available nutrient science and report to the department. In our observation, the committee has been attempting to connect dots that shouldn't be connected in order to reach the objective. We recommend that the department continue its research internally to support the development and implementation of the nutrient strategy, but that the committee cease as a separate isolated group.

If the department decides to continue with the committee, the structure of the committee needs to be changed to include other scientific disciplines. The current make-up of the committee does not allow for consideration of all points of view. A multi-disciplinary group would create a better work product if the department decides to continue down this path. We appreciate the effort the department has made to allow the public to observe the committee meetings and view documents on the internet, but the direction has been left unchallenged because of the make-up of the committee. A better alternative is to identify what we know

scientifically and what we don't know so that adaptive management can take place to work toward improvement of our water quality. Forcing a conclusion in order to identify good and bad water quality without strong scientific justification is not a good use of our state's resources. We would ask that this committee be discontinued or the scientific effort be refocused.

Our comments on the details of specific rulemaking proposals related to the topic areas in the work plan are reserved for those rulemaking processes. We have concerns about the potential direction of some of the topics listed in the work plan, but we will leave these concerns to discussions during those rulemaking processes. For example, wetlands and lakes should be separated in the use designations, but how that is accomplished should be discussed during that rulemaking process. In conclusion, we ask that the work plan include rulemaking with or after batch 4 of the use attainability analysis to eliminate the rebuttable presumption. We also ask that the stream nutrient technical advisory committee be realigned toward scientific support for the development and implementation of the nutrient strategy.

DNR Response:

Issue 1 - Elimination of the rebuttable presumption.

The rebuttable presumption issue is a complicated one. The rebuttable presumption in our Iowa Administrative Code was put in place to help meet key aspects of the Federal law, that of the Clean Water Act, under CWA 101(a)(2). "The Water Quality Standards regulations within the Clean Water Act, [hereinafter referred to as 'the Act'], effectively establish a "rebuttable presumption" that the CWA 101(a)(2) uses [fishable and swimmable] are attainable and therefore must be assigned to a water body, unless a State or Tribe affirmatively demonstrates, with appropriate documentation, that such uses are not attainable." The Use Assessment/Use Attainability Analyses (UAAs) were designed as a tool to meet that goal.

The department understands the concerns about implementation of the rebuttable presumption, but the UAA process conducted as part of that has been effective in allowing many streams in Iowa that fell under the presumption to be more appropriately designated. It is important to note here that many streams that are viewed as just drainage ditches and small use streams are actually quite frequented by local residents, even if only for trapping, so this has to be considered in this process. A review of the policies and procedures in this arena would not be an unworthy effort. We have reached a stage where there are fewer streams that require designation, so as we move forward, there may be an appropriate time to review and revise, if necessary, this process. With that being said, however, we do not feel this is the right time to take on that action. We have many of the thousands of stream designations already

conducted. We currently have approximately less than a hundred facilities that require these assessments for their NPDES permits, although we do add more as new facilities come into play. These are at nowhere near the volume they were at during the start of this program. The EPA reviews and handling of those streams have reached faster turnaround as the number of streams in the mix is lowered. A rulemaking change at this time could take several years to come to final culmination, and this would leave a number of streams that have already had their assessments caught in the middle, waiting years longer for their permits. We have a set process right now, it does work, and we feel that the next Triennial Review period would be a more appropriate time to consider this.

Issue 2 - Stream Nutrient Technical Advisory Committee

How to address nutrients has been, and continues to be, a significant concern in Iowa. As discussed in previous sections in regard to Nutrients, IDALS and DNR are working together with numerous other agencies and organizations in development of an overall Nutrient Strategy program. DNR's overall involvement in that Nutrient Strategy team was just taking shape at the time the DRAFT Work Plan was being prepared. Several months have now passed, and there is more definition on what the joint approach might look like. IDALS will take the lead on working with the nonpoint source aspects, and DNR with the point source issues.

Since that interagency effort is already going on separately from the Triennial Review process, this is an area that will not be directly included in the Triennial Review process. It will be the work of that Nutrient Strategy team to evaluate how to address nutrient management and numeric nutrient criteria.

The DNR's contact person for this Nutrient Strategy team is Adam Schnieders:

Adam Schnieders
NPDES Supervisor
Iowa Department of Natural Resources
502 East Ninth Street
Des Moines, IA 50319
515-281-7409
Adam.schnieders@dnr.iowa.gov

United States Environmental Protection Agency (EPA)

Commenter:

1. Classifying the Human Health Designated Use. – under the Rebuttable Presumption

The EPA reiterates the need for Iowa to designate human health uses where the conditions allow for fish consumption activities. The Clean Water Act and the EPA's water quality standards regulations establish a rebuttable presumption that the CWA section 101(a)(2) uses, protection and propagation of fish, shellfish, and wildlife and recreation in and on the water ("fishable/swimmable" uses) are attainable and should apply to all waters. Throughout the IDNR's UAA process, a minimum number of streams have received the human health use designation and, as a result, not all streams are protected with the associated human health numeric criteria. By definition of the Class B (WW-1) and because of the type of aquatic organisms that have been caught during the UAA process, it is very likely that fish and other aquatic organisms could be consumed by the public in all Class B(WW-1) streams and possibly some Class B(WW-2) streams.

On page 14 of the complete draft Plan, EPA notes that the internal DNR group may have mischaracterized the meaning of the human health use designations. The human health use designations that the EPA has discussed with the IDNR are not merely associated with bacteria and the contact recreational uses; the designations also pertain to the protections afforded to people who consume fish and water by applying the existing 304(a) human health numeric criteria.

2. Arsenic criteria

In reference to page 16 of the complete draft work plan, it appears that the IDNR may have inadvertently identified the wrong designated use associated with its arsenic criteria. This comment is based on the following statement contained in the draft work plan:

"This ambient criterion applies to water bodies designated as Class C drinking water uses."

Chapter 61, Table 1. Criteria for Chemical Constituents, clearly identifies Iowa's arsenic criteria as applying to Iowa's human health designated uses of fish consumption, and consumption of both fish and water; Iowa has not adopted an arsenic criterion for the Class C drinking water use.

DNR Response:

Issue 1 - Classifying the human health designation under the rebuttable presumption.

DNR understands that it needs to populate the Human Health designation with more streams. This is an ongoing project that will be conducted as schedules allow.

In past discussions with EPA, we were of the understanding this concern was in relationship to bacteria and beaches.

Issue 2 - Iowa has not adopted an arsenic criterion for the Class C drinking water use.

DNR understands the need to create an arsenic criterion for the Class C drinking water use. Arsenic in and of itself is something that needs to be explored more broadly as well, to address other uses. The naturally-occurring arsenic that occurs in the Midwest makes determination of arsenic criteria complicated given the background levels present; hence, the reason for forming a study group to further consider this. This will be included in the technical advisory committee discussions as it works through this issue.

Recommendations

Based on comments from the public and stakeholders, DNR will make the following revisions and issue a FINAL Work Plan:

1. Nutrients

Nutrients issues will be addressed under the interagency Nutrient Strategy team, with cooperative efforts from IDALS, DNR, and other groups. Therefore, while being an issue raised in the Triennial Review, and with the understanding this is an ongoing state issue that a larger strategic approach has been formulated, it will not be directly addressed as part of the Triennial Review activities. Therefore, direct action references will be removed from the Triennial Review Work Plan.

For more information on the work being conducted by the Nutrient Strategy team, please contact Adam Schnieders:

Adam Schnieders
NPDES Supervisor
Iowa Department of Natural Resources
502 East Ninth Street
Des Moines, IA 50319
515-281-7409
Adam.schnieders@dnr.iowa.gov

2. The department will consider taking a look at the rebuttable presumption as a potential topic for the next Triennial Review period, and this issue will be added to a list of items to revisit at that time.
3. Human health designations will be looked at and populated as time allows during the Triennial Review period. This will be added to the Work Plan.
4. Arsenic as it relates to a Class C criterion can be looked at as part of the overall arsenic review under this Triennial Review. This discussion will be added to the Work Plan.
5. The Work Plan Schedule has been modified: the Nutrients scheduling information has been removed for the reasons outlined in this document, and the Metals project has been moved to begin in the third quarter. This has been done to allow the department to concentrate

on rulemaking efforts being conducted for the Fourth Batch of UAAs and the Waste Load Allocation Procedure (WLAP).

**APPENDIX A:
ESTIMATED WORK SCHEDULE - FROM DRAFT WORK PLAN**

TABLE 8 – Estimated Work Schedule				
	First Quarter (Jan-Mar)	Second Quarter (Apr-Jun)	Third Quarter (Jul-Sep)	Fourth Quarter (Oct-Dec)
2012	<ul style="list-style-type: none"> * Metals – information gathering * Cold Water - information gathering * Nutrients – Stream TAC cont. * Nutrients – Nutrient Strategy meetings * UAA - Initiate Batch 4 rulemaking * UAA – Batch 3 Pending EPA Review * WLAP – rulemaking Final Development and TAC 	<ul style="list-style-type: none"> * Metals – information gathering * Cold Water – form Technical Advisory Committee (TAC) * Nutrients – Stream TAC cont. * Nutrients – Nutrient Strategy meetings * UAA – Batch 5 Field Work * UAA - Batch 4 rulemaking * UAA – Batch 3 Pending EPA Review * WLAP – rulemaking Stakeholder meetings/Rulemaking 	<ul style="list-style-type: none"> * Metals – form TAC Information gathering * Metals – Technical Advisory Committee meetings * L&W – information gathering * Cold Water – TAC * Nutrients – Stream TAC cont. * Nutrients – Nutrient Strategy meetings * UAA – Batch 5 Field Work * UAA – Batch 5 prep UAAs * UAA - Batch 4 rulemaking * UAA - Batch 3 Pending EPA Review * WLAP – Rulemaking 	<ul style="list-style-type: none"> * Metals – TAC meetings Information gathering * L&W – information gathering * Cold Water – Stakeholder meetings * Nutrients – Stream TAC cont. * Nutrients – Nutrient Strategy meetings * UAA – Batch 5 Field Work * UAA – Batch 5 prep UAAs * UAA – Batch 5 Initiate rulemaking * UAA – Batch 4 Pending EPA review
2013	<ul style="list-style-type: none"> * Metals – EPA Consultation form TAC * Metals – Technical Advisory Committee meetings * L&W – EPA Consultation * Cold Water – EPA Consultation * Cold Water – Prepare rule changes * Nutrients – EPA Consultation * Nutrients – Nutrient Strategy meetings * UAA – Batch 5 rulemaking * UAA – Batch 4 Pending EPA review 	<ul style="list-style-type: none"> * Metals – Stakeholder meetings TAC meetings * L&W – Form TAC * Cold Water – Rulemaking * Antidegradation – Information gathering * Antidegradation – Form TAC * Antidegradation – TAC meetings * Nutrients – Nutrient Strategy meetings * Nutrients – TAC meetings * UAA – Batch 6 field work * UAA – Batch 5 rulemaking * UAA – Batch 4 Pending EPA review 	<ul style="list-style-type: none"> * Metals – Stakeholder meetings EPA Consultation * L&W – TAC/Stakeholder meetings * Cold Water – Rulemaking * Antidegradation – information gathering * Antidegradation – TAC meetings * Nutrients – Nutrients Strategy meetings * Nutrients – Stakeholder meetings * UAA – Batch 6 field work * UAA – Batch 6 prep UAAs * UAA – Batch 5 Pending EPA review 	<ul style="list-style-type: none"> * Metals – Prepare rule changes Stakeholder meetings * L&W – TAC/Stakeholder meetings * Cold Water – Pending EPA review * Antidegradation – EPA Consultation * Antidegradation – Stakeholder meetings * Nutrients – Nutrients Strategy meetings * Nutrients – Stakeholder meetings * UAA – Batch 6 field work * UAA – Batch 6 prep UAAs * UAA – Batch 6 initiate rulemaking * UAA – Batch 5 Pending EPA review * Triennial Review – Internal stakeholder meetings * Triennial Review – EPA Consultation
2014	<ul style="list-style-type: none"> * Metals – Prepare rule changes Stakeholder meetings * Metals – rulemaking * L&W – TAC/Stakeholder meetings * Cold Water – Pending EPA review * Antidegradation – Stakeholder meetings * Nutrients – Nutrient Strategy meetings * Nutrients – Stakeholder meetings * UAA – Batch 6 rulemaking * UAA – Batch 5 Pending EPA review * Triennial Review – External stakeholder meetings * Triennial Review – Public meetings 	<ul style="list-style-type: none"> * Metals – rulemaking Prepare rule changes * L&W – TAC/Stakeholder meetings * Cold Water – Pending EPA review * Antidegradation – Prepare rule changes * Nutrients – Nutrients Strategy meetings * Nutrients – Prepare rule changes * UAA – Batch 7 field work * UAA – Batch 6 rulemaking * UAA – Batch 5 Pending EPA review * Triennial Review – Organize data/TAC 	<ul style="list-style-type: none"> * Metals – Pending EPA review Prepare rule changes * L&W – Prepare rule changes * Cold Water – Pending EPA review * Antidegradation – Rulemaking * Nutrients – Nutrients Strategy meetings * Nutrients – Prepare rule changes * UAA – Batch 7 field work * UAA – Batch 7 prep UAAs * UAA – Batch 6 Pending EPA review * Triennial Review – Prepare Work Plan 	<ul style="list-style-type: none"> * Metals – Pending EPA review Rulemaking * L&W – Rulemaking * Antidegradation – Rulemaking * Nutrients – Nutrients Strategy meetings * Nutrients – Prepare rule changes * Nutrients – Initiate rulemaking * UAA – Batch 7 field work * UAA – Batch 7 prep UAAs * UAA – Batch 7 initiate rulemaking * UAA – Batch 6 Pending EPA review * Triennial Review – Stakeholder review * Triennial Review – EPA review