

Stakeholder Meeting #1B, June 22, 2020, 1PM-3PM
Questions and Comments on 2020 CPP Draft

1. **[Question] Shon Simpson (GBMc & Associates, Arkansas Environmental Federation):** BLM has been introduced [in the CPP] to be used to adjust hardness-based metals criteria, and the water effects ratio (WER) procedure is still in the document. And I'm just wondering on how those two are going to work together. My basic issue is, EPA has been extremely discouraging in the use of water effect ratios for the last couple of years; I had a call from the Planning Section a couple of years ago which indicated that water effect ratios would no longer be allowable in Arkansas. So I would like to know the thinking on the interplay between the BLM and the water effects ratio and whether both are going to be allowed to be used.
 - Russell Nelson (EPA): EPA's guidance shifted in 2007 away from water effect ratios (WERs) to the biotic ligand model (BLM). Therefore, that's been our guidance since 2007. States or an entity can do a water effect ratio, but if you do and do not look at all the parameters that would be covered by a biotic ligand model when submitted to EPA, EPA will use its missing parameters document to actually run a BLM to determine if that water effect ratio is appropriate or within reason. And if they're fairly close, we're good with the WER, but if not, we'd recommend the BLM because that's the more scientifically defensive methodology.
2. **[Question] Shon Simpson (GBMc & Associates, Arkansas Environmental Federation):** Question on testing sensitivity [MQL requirements in Chapter 4 of 2020 Draft CPP]. Does this mean permittees should go shopping for a laboratory that only tests to this required MQL and indicates if anything below that MQL is ND? Have you talked to any [commercial] laboratories?
 - Bryan Leamons (DEQ): We lay out basic minimum requirements for MQLs in our forms and also in the CPP revisions. I really don't have a comment or recommendation on how the facilities should shop around for labs. All we're saying is that the minimum sensitivities have to be met that we've outlined in our forms and documents.
 - Shon Simpson: If you just hit the sensitivity required, is it then acceptable to report it as not detected?
 - Carrie McWilliams (DEQ): In the history of this...it's not so much that we want you to back up the quality of your work, it's just a matter of when we have quality of work all over the board and it has to meet a minimum. We just basically provide some way of saying this is how we deal with the data.
 - Shane Byrum (DEQ): If the lab has an ultra-sensitive piece of equipment and they achieve lower than the MQL, then that meets our requirement. They've achieved the MQL, but at the same time, if they can accurately report, quantify a number, even if it's less than that required MQL, they should go ahead and report that number. More than likely it will not show RP [reasonable potential] if they're reporting a number that's under the required MQL anyway. Nobody knows what each individual lab does and what each individual lab has as far as the equipment that they have, so we're just basically saying, here are the minimum requirements, just make sure you meet those.
 - Penny Semberski (DEQ): In your examples earlier the required MQL for zinc was 20, the lab achieved 10, but they reported 8. And that 8 is considered a J value because it is

below their MQL, so it's considered estimated because it's below their low standard but above their MDL. And when they report J values, we take them into account just as if they were non-estimated numbers. So it seems like it would be to the permittee's advantage if they did not report J values, anything below the required MQL...I don't see what advantage there is for them to be reporting any values below the required MQL.

- Bryan Leamons (DEQ): We can certainly make a note on those comments and questions to examine what we could add for further guidance when that case does come up because I think it's a worthwhile question. It's probably been asked over the years, so we will make that note.

3. [Question] Colene Gaston (Beaver Water District): MQLs on pg 45 of the CPP – are they identical to what's in 40 CFR 136? How often will these MQLs be updated if the CFR numbers are changed?

- Bryan Leamons (DEQ): There might have been one we had found that was not published.
- Carrie McWilliams (DEQ): It [the currently missing MQL value] is included in EPA's form but for some reason it was omitted in our PPS form and we've been trying to reconcile. That's still in the process.
- Bryan Leamons (DEQ): As far as updates, we follow and update our regs as needed to keep up with the CFR, 136 included. We would have to make accommodations to update if the CFR were to be updated even if we had not gotten around to the CPP yet. We would, at minimum, update our PPS form and also our requirements for sensitivity if one were to become changed.
- Shane Byrum (DEQ): When you look through the list of approved test methods and [40 CFR] 136, a lot of parameters have more than one approved test method. So the MQLs that are listed in the CPP would be the minimum MQL. For instance, there may be an approved test method that gets more sensitive, but it's still an approved method. That's out there in [40 CFR] 136 that lines up with the minimum that we have stated. There may be instances where you have an approved test method that's more sensitive and that would be allowable to use. That's where the MQL numbers came from. The MQLs match up with what's in [40 CFR] 136 as far as the least sensitive test method that's approved.

4. [Question] Why was the Antidegradation Implementation Methodology [AIM] not included in the CPP per [40 CFR] 130.5(b)(6)?

- [40 CFR 130.5(b)(6): “The process for establishing and assuring adequate implementation of new or revised [water quality standards](#), including schedules of compliance, under section 303(c) of the [Act](#).”]
- Bryan Leamons (DEQ): Mainly a matter of preference, an unknown for the matter of timeline, the comments we may get, or the changes that may be needed, so we don't know that those two documents [CPP and AIM] are going to track at the same rate as they make their way either to the public or the EPA. Although they could have been one in the same—everything included as part of the CPP—we chose to separate them so that each could potentially follow their own timeliness track.
- Russell Nelson (EPA): One of the major parts or reasons for it [inclusion of AIM in CPP] is implementation of permits and that particular site in the federal regs refers to implementation for water quality standards and schedules of compliance. But your antidegradation implementation methods are implementation of one of the three portions of water quality standards and that's why I raise that question, whether they would be

integrated or not. And I understand the timing issue as you're developing them, but going forward a lot of places, it makes sense to incorporate that directly into your CPP because the point of the part of the water quality standard direct revision was to ensure that the public had involvement in the process any time you do a tier two review, which is required by reg any time you issue a permit.

- Bryan Leamons (DEQ): I would just say I appreciate the comment and perhaps those two plans would come together at some point at a later date. We just anticipated they could track differently, especially with one plan being very new. And that's the Antideg being a very new thought process and then the CPP being a very old and already-in-place process. We chose to keep them separated.

5. [Question] Justin Stroman (Arkansas Game & Fish Commission): pg 16 of CPP, Table 1-1, where would the Antideg review occur in this table?

- Bryan Leamons (DEQ): That would occur...as part of the applicant's review and preparation of the filing for a permit or permit modification, to be reviewed and rolled out as part of the draft decision-making process. We're going to walk through that in the next few meetings to see how that works.

6. [Question] Shon Simpson (Arkansas Environment Federation): pg 65 of CPP, 7Q10 Stream Flow requires a minimum of 10 years of daily stream flow data and the way it typically works is if you've got 50-70 years of data. A lot of times that 7Q10 may be based on data during a stretch in the 1940s-70s or so. Due to changes in climate creating different hydrology out there, should the calculated 7Q10 streamflow be updated exclusively using the most recent 10 years of data as a better predictor of the next 5-year permitting cycle? Or is the preference to still use the older data?

- Bryan Leamons (DEQ): I think using traditional methods to estimate something like 7Q10 would be a great first step, but if you've got data that points you into something at least significantly different, that should be evaluated and at least the question as to why is this a better representation should be asked—about choosing the proper background flow—[this] would certainly be up to a case by case analysis and good decision-making.

7. [Question] Shon Simpson (Arkansas Environment Federation): If you have a known 7Q10 and there's an equation given that you can use to estimate harmonic mean flow, is it fairly accurate? Has the equation been used before and if so, how well did it work?

- Shane Byrum (DEQ): Harmonic mean flow can sometimes be obtained from StreamStats. Sometimes it will not give you that so it's really a case-by-case thing. Most of the time we rely on StreamStats to get 7Q10s and then there's also this study that was done by USGS...They went through a lot of continuous record and partial record stations. For the continuous record stations, there's an actual published value of the 7Q10 and it tells you the period of record where the stations are located...On the back of that book [study report] is the partial records station list. They give a 7Q10 value. So if the value can't be retrieved out of that book...then the second option for 7Q10 would be to run a StreamStats on the actual discharge location and to see if that gives you a value. Those are basically two of the main options we use to determine 7Q10s. We certainly don't try to calculate the 7Q10 ourselves, we traditionally leave that up to USGS. There is a caveat...The state StreamStats equations have not been developed for the Delta regions, so we have historically relied on the 1980s map from the Geological Commission for

those. At this time, that's all we have. If you can get it with USGS StreamStats, that's usually a pretty scientifically-defensible value. And if not, there is an equation you can estimate that using the 7Q10 value. That would be an option too...If you know the 7Q10 value, you can estimate the harmonic mean using that equation [in Section 4.13.2.3.3 of the CPP].

- Shon Simpson (AEF): Shane, my actual question was just whether you guys have taken USGS datasets and actually downloaded the data and calculated the harmonic mean flow using the actual equation for driving a harmonic mean flow. And then have you tested that against the equation shown in 4.13.2.3.3? Does that equation give you a pretty accurate number based on comparing just a straightforward calculation of harmonic mean flow using the raw data? And perhaps you haven't done that.
- Shane Byrum (DEQ): I have not done that...pick a site and try to compare them, no. I know that's been done before [using the equation given in Section 4.13.2.3.1]. I remember doing one using the actual daily flow data and you may have 10,000 values and you need to go through with a spreadsheet and calculate out that harmonic mean—that's been done before. But as far as comparison between using that equation [4.13.2.3.1]...versus the one below that [in Section 4.13.2.3.3], I'm not aware of any comparison that's been done.

8. **[Question] Ellen Carpenter: pg 77 of CPP, on Total Phosphorus (TP) [Section 4.15.6] says that under total phosphorus “All point source discharges into the watershed of waters officially listed on Arkansas’s 303(d) list for nutrients may be considered for discharge permit limits based on Rule 2.509.” Currently 2.509 has requirements for phosphorus if you have a certain sized facility and I personally think those limits are way too high anyway, but under the proposed reg. too. How is all that going to interact? Because when you want to take those out, then you’re just going back to establishing limits based on narrative criteria, which we all know has not gone well. Secondly, what will that do to existing permits? I assume that the existing permits that have total phosphorus limits...will nominally continue to have those numbers because of antibacksliding.**

- Bryan Leamons (DEQ): I think antibacksliding would be a primary first concern if those exist in a permit, so yes on that.
- Ellen Carpenter: Once you take those limits out, now you're only left with the narrative criteria for total phosphorus. How are you going to put total phosphorus limits? How are you going to know if the monitoring and reporting are showing excessive nutrients based on total phosphorus if you only have narrative criteria?
- Bryan Leamons (DEQ): I would say at least at minimum you’re monitoring and reporting. Your discharge would have to be compared against the actual activity of the stream and the effects on the stream as compared to your narrative criteria. If we remain with a narrative and not a numeric criteria, we would have to rely on the status of the stream, either impaired or not impaired. That would be the first thought process on that.
- Ellen Carpenter: Well there are a lot of factors that go into ensuring that you're in compliance with the total phosphorus narrative criteria. I was just pointing out this inconsistency and that there's potentially a trap ahead.
- Bryan Leamons (DEQ): I would not disagree [that] it’s complex, and comment noted.

9. **[Question] Colene Gaston (Beaver Water District):** To follow up briefly on the nutrients provision; it seems that this is a very limited and restricted provision in the CPP. What are your thoughts on making the nutrient provisions consistent with any changes in Reg 2? More broadly, what are your thoughts on how the CPP will be updated?

- Bryan Leamons (DEQ): There's no time frame set in the [40] CFR, and it discusses updates to CPP as needed. It doesn't really give us a lot of guidance. I would agree 20 years seems to be quite a bit too long.
- Colene Gaston (BWD): How are you going to allow for that, and will there be something in the CPP that specifically says any changes to the water quality in Reg. 6, or 2, or even Reg. 5 which are more specific or more stringent control over what's in the CPP?
- Bryan Leamons (DEQ): That's a good point, and I think it is a given that the rules would have to be followed as they become effective or changed and become effective. But if it's not clear, we should make a note on how that would be implemented. We can certainly add a comment on that.
- Russell Nelson (EPA): That is correct. There is no specific timeframe, but there are no limitations to revising portions of the CPP and EPA reviewing them periodically.

10. **[Question] Shon Simpson (Arkansas Environment Federation):** Question about ammonia permitting and the watershed size component that I understand is used by DEQ to make decisions about whether ammonia limits apply on a seasonal basis on watershed discharges to watersheds that are 10 sq. miles or less. I think I've got a fairly old policy memo that, it's my understanding, is being used to permit ammonia now. I did not see any kind of watershed size differentiation in the ammonia permitting. Am I correct in the way I think it's working now and is that intended to be continued into the future? And if so, does it need to be specified in the CPP?

- Bryan Leamons (DEQ): I don't expect any change at this time the way we're implementing ammonia, but with that question I would lean on Shane. Do you see any changes, or have any comment regarding our current implementation of ammonia limits on the 10 square mile or less waterbody size?
- Shane Byrum (DEQ): No, it was intended to continue our current implementation... Shortly after that memo was written, there was a spreadsheet that was worked up that basically helps the permit engineers to implement the toxicity standards, to figure out what the toxicity value would be. And that's based on the ecoregion. It's also based on whether it's a major or minor source classification. But then you're referring to the 10 square mile watershed and I believe that the current implementation is if it's less than 10 square miles at the discharge location, that's based on Rule 2 — insufficient water for a fishery. If it's less than 10 square miles, I believe this spreadsheet tells you that it's not a fishery during the critical season. What happens then is just whatever the dissolved oxygen model has for the effluent input, that's the number that's used to protect the DO standard. That was intended to continue as currently being implemented. And we can certainly add that if it's not there in the draft. There could be a statement in the draft CPP that addresses that.

11. [Question] Colene Gaston (Beaver Water District): What is DEQ's schedule for ruling out numeric nutrient criteria [based on Section 4.15.6 on Total Phosphorus (TP)]? What is the plan and schedule? My understanding was that most of the work had been done for some set of numeric nutrient criteria.

- Bob Blanz (DEQ): We've collected the data, and we're doing it by ecoregion. We collected the data in the Boston Mountains and the Ozarks and one other that I can't remember. And we're currently collecting the data for numeric nutrient criteria down in the Gulf Coastal Plain this year and next year, so we've got a few more ecoregions to go before we are able to come up with the statewide ecoregion-based standard.
- Colene Gaston (BWD): I thought the original idea was to go ahead and roll out the numbers for the Boston Mountain, Ozark Highland, or combined ecoregions before waiting for any other ecoregion.
- Bob Blanz (DEQ): The rationale was that we would publish one for one of the ecoregions or maybe even what we call the Central Highlands, which includes a couple of them. And we did that as a test to see how we're going to administer numeric number and how it's going to work in permitting process, but we decided that it really is inequitable in terms of the permittees in that part of the state. And so we've decided that, at this point anyway, we're still going to wait until we have all the data for the state.

12. [Comment] Justin Stroman (AGFC): I'm looking at Section 1.8, page 9 and 10 referring to 401 Water Quality Certifications and you guys have gone so far as to define what WOTUSs are and that's a moving target between various lawsuits and the administration coming in and going over the years. It may be helpful to either just reference WOTUS as whatever 404 is and not spell it out, or if it's going to change maybe one or two administrations from now again... So maybe either not defining it there or just leaving it somewhat more nebulous may be helpful if that changes. Just having the ability to fix stuff like that every so often without having to go through a long process or just defining when it is, I think, would be helpful.

- Bryan Leamons (DEQ): WOTUS was one of the last topics we discussed, and we will continue to think about that comment. And we will think about ways in how we revise the CPP going forward.
- Bob Blanz (DEQ): EPA just published new proposed rule-making on 401 Certification for states to steps they would have to go through and the timeframes that have to be adhered to for 401. That's all in the middle right now, and that's why this is vague like it is because we don't know where that's going to come out when that rule is final.
- Russell Nelson (EPA): What you said is correct as far as 401 but let me step back for just a second on the waters of the US. That guidance speaks to federal jurisdiction. That does not control the states' jurisdiction. You can protect your waters however you so choose, that [WOTUS guidance] just speaks to federal jurisdiction. But you're correct on the 401 and the new guidance that is just coming out.
- Bob Blanz (DEQ): And the Arkansas definition of waters of the state is much more inclusive than the WOTUS definition.

13. **[Comment]** Colene Gaston (Beaver Water District): [suggesting based on previous point] The state can interpret their jurisdiction more broadly than for NPDES permitting even and I think that should be noted in the document.
14. **[Question]** Colene Gaston (Beaver Water District): Back to the nutrient issue because this is very important for drinking water utility source water protection. You said you're going to wait until you had all the numbers developed for all the ecoregions. When is your best estimate on this completion?
- Bob Blanz (DEQ): I think it takes two years to do one ecoregion and we're on number four, [and] so there are six ecoregions. That is the timeline that it could take to get the rest of the data.
 - Colene Gaston (BWD): Can you give me a calendar year? Again, this is just the best estimate.
 - Bob Blanz (DEQ): We're in the second year on the Gulf Coastal Plain and we have two more ecoregions to go. If I count my ecoregions correct, that would be four more years, so it would be sometime in 2025 maybe. I don't know when the triennial review would cycle into that.
15. **[Comment + Question]** Jessie Green (White River Waterkeeper): It would definitely be helpful to have another stakeholder meeting specifically on the CPP. There are a lot of things that certainly need more review since we received these documents. Going back to total phosphorus again as Ellen had mentioned, with the intent of removing that language in regard to total phosphorus discharge limits corresponding to facility design flows. Has there been any discussion if that language is removed from Reg. 2 and putting that into the CPP specifically?
- Bob Blanz (DEQ): I don't think we're proposing to remove the language in this version of Reg. that's going to the Commission on Friday. It's still in there.
16. **[Comment]** Ellen Carpenter: CPP references nutrient language as Reg. 2.509 rather than Reg. 6, but this should be solved once we get the new criteria.
- Bryan Leamons (DEQ): That's a good point. We'll sort out the language and location of that.
17. **[Comment]** Teresa Turk (Buffalo River Watershed Alliance): I would appreciate an additional meeting where we talk about the CPP. I also am concerned about the delay or the extended time period to where we develop numeric nutrient criteria. I think that's been a serious deficiency in the way we regulate our waters here in the state of Arkansas. So if there's any way to expedite that or we can have certain ecosystem ecoregions assessed and numeric criteria created, I would really strongly encourage to go down that path.
- Bryan Leamons (DEQ): Thank you for those comments.
18. **[Comment]** Ellen Carpenter: I agree that it would be really helpful to have yet another meeting to discuss some of these subjects, but we can't get to because we haven't read it all.

19. [Question] Colene Gaston (Beaver Water District): I'm not clear if a decision was made on the process for as we go along and come up with some things that we want to put in writing just to clarify or make it easier for DEQ to address questions. What is the process that we should follow? I know you had the link for submitting comments, so should any comments we have be submitted to that and when will you make those comments available to the rest of the group?

- Bryan Leamons (DEQ): The best way to submit a comment is through the email that we provided to lay out the point and provide reasoning behind it and that way it's clear for the record. This venue also is very good but it's more of an open discussion. So if you've got a question or comments ready to put in the record, then writing them out is probably the best way. And send those to the email, CPP-antideg-comments@adeq.state.ar.us, that we had provided.
- Colene Gaston (BWD): How are those going to be posted for the group to access and see?
- Bryan Leamons (DEQ): I believe it was our intent to provide comments as they're submitted so we'll have to review those emails as they come in to determine which contain comments and it will be posted for the record because, like we had said, we're accepting comments and will be for a period so they'll be part of a record I presume to be posted on the webpage [<http://www.adeq.state.ar.us/water/cpp/>] as they are processed. I can't determine how long it takes to review and process those and get them on the webpage, but that's the initial plan.
- Carrie McWilliams (DEQ): We're recording this webcast right now and from that we're going to tease out the comments versus the questions and we're going to consider those as submitted comments. We have scribes also that are taking notes and pulling that information out. I'm not quite sure how long it will take us to get that and condense it into comments, but the intent is to post those back on the webpage as soon as we can.

20. [Question] Russell Nelson (EPA): The document on the page is titled triennial Reg 2 Preliminary Discussion Draft—is that what's going to Commission?

- Bob Blanz (DEQ): Did you get it off the Commission's webpage?
- Russell Nelson (EPA): I got it off of DEQ's.
- Bob Blanz (DEQ): You probably need to go to the Commission webpage and it'll be an appendix to the agenda item for this Friday.