

Stakeholder Meeting Notes – July 7, 2020
Questions and Comments on Draft Antidegradation Implementation
Methodology (AIM)

1. **[Question] Russell Nelson (EPA):** Zach, question about cumulative cap, because over succeeding permit cycles—if you're using 10% every time, you're eventually going to use up all the assimilative capacity and I don't think the draft had any mention of cumulative cap in it.
 - Zachary Carroll (DEQ): I think it was our intent that this would be a cumulative process here. If somebody had already used part of this assimilative capacity, then that would be considered already used for anybody who were to come in immediately downstream of them [for example].
 - Bryan Leamons (DEQ): That is the tentative plan if someone uses one of these 10% insignificance determinations—that it would stay, not only with the permitting file but with the 208 Water Quality Management Plan [WQMP]. So we can track that as needed. As Zach said, we don't anticipate a lot of people being able to use the 10% method because it may only be available in large rivers when you have a lot of benefit of background flow. We do have a capacity to keep up with that information.
2. **[Comment] Colene Gaston (Beaver Water District):** I think there should be a mention of how that's going to be accounted for and kept track of in the methodology instead of just saying 'it's our intent to do that'—both as to the 10% that's used and if it's determined to be an insignificant [and if it is] less than 10%, then that needs to be tracked as well. I understand that it's unlikely that's ever going to add up to make a difference, but it could, conceivably. Can you change the language of the methodology to make it specific about how you're going to track—[regarding] what part of the assimilative capacity has been used by each permit application or each permit that's granted?
 - Bryan Leamons (DEQ): We'll consider the comment and make adjustments if needed.
3. **[Question] Colene Gaston (Beaver Water District):** Are you going to talk some more about what flow is used on the significant or non-significant degradation determination?
 - Zachary Carroll (DEQ): It's the critical low flow. That's in our Continuing Planning Process [CPP], at least. The 7Q10—the critical low season flow.

4. **[Comment] Teresa Turk (Buffalo River Watershed Alliance): [Referring] all the way back to why these implementation plans that we're discussing right now are non-binding... it seems to me if they're non-binding, then they don't have legal standing.**

- Zachary Carroll (DEQ): I think the intent here is that this is not part of one of our official pollution and ecology commission rules here.
- Bryan Leamons (DEQ): Yeah, Zach, that's basically true. It's not a rule. We might have others on the call we may defer to but that's the general difference. The rules [have] been through Commission rulemaking procedures. And these are guidance documents which are very important but we cannot predict the individual unique situations that may pop up. And we have to sort through the details, so it's hard to have a guidance document address every possible scenario. But others may have a comment on that.
- Russell Nelson (EPA): I can speak to that, at least from EPA's point of view. We don't require the implementation to be a binding regulation, but so long as there is a link to this from your policy... because EPA does have authority to review and approve implementation just like the policy, so even if it's not a binding rule we still have reach to it. But we have always advised the states—particularly in Region 6—to include their implementation in their CPP under [40 CFR] 130.5(b)(6) because you have great autonomy in revising your CPP. And if you should find an implementation procedure that's not working well or [is] just not well designed, you can always edit that in your CPP, and that's the only part of the CPP that you would have to submit for review and approval. And that's not a big issue; we do that all the time.

5. **[Questions] Teresa Turk (Buffalo River Watershed Alliance): Two questions: 1) Do most states have binding implementation procedures? and 2) Is the CPP a legally binding document?**

- Russell Nelson (EPA): The CPP is a legally binding document because it's required by regulation, but those nine elements are also outlining the process for these things. So sometimes they're not very detailed, but it's to the state's advantage to have detailed implementation so everyone knows what you're doing. And that's one of the reasons we revised the regulation in 2015 and specifically spoke to this in Antidegradation Implementation in that revision to make sure that not only the public was well informed and involved, but that it was a transparent process.

6. **[Question] Teresa Turk (Buffalo River Watershed Alliance): Why are nonpoint sources not part of an antidegradation review?**

- Zachary Carroll (DEQ): The nonpoint sources are fairly complicated situations. These often have oversight from a lot of different regulatory agencies and it can

be very difficult to determine the exact amount of pollutants coming out of them, I think in many cases.

- Teresa Turk (BRWA): I agree they're really complicated, but much of the degradation that we're seeing in streams, especially outstanding river or extraordinary resource waters, are coming from nonpoint sources and I just think this is a bad idea to not include those in this policy and implementation document.
- Bryan Leamons (DEQ): I would just comment that you're right, there are a lot of types of sources and significant quantities can come from nonpoint [sources]. Similar to what Zach had said, many [nonpoint sources] are regulated in other ways and not regulated by NPDES and that's what's made it difficult. But we've chosen for now that this is the discussion and the reach that we're taking right now. Including nonpoint in a way that the state is required to assure is discussed in the document. [There is] some discussion that there's some assurance to be made that other programs manage nonpoint sources, but we would not require antideg review at this time.
- Russel Nelson (EPA): Let me just put out one thing: that the standards regulation actually requires that the state assure that the highest statutory regulatory requirements for nonpoint sources be considered in antidegradation reviews.
- Teresa Turk (BRWA): I think it would be helpful to cite those other areas where nonpoint source is being regulated or if it's being tracked or there's some oversights instead of just leaving this [as is], saying [that] this is completely out of the realm of this review. So a citation would be very helpful.
- Bryan Leamons (DEQ): I will note your comment and consider it as we go forward.
- Shawn Hodges (National Park Services): Just a note to Terresa's comment about non-point sources, these are included in the BWQ [baseline water quality].

7. [Question] Honorable Darryl Mahoney (Arkansas Association of County Judges): Dr. Carroll, you mentioned that some of the waters that were going to be discharged into might not have a water quality on them. Do we have a percentage of those in the state of Arkansas that do not have any water quality data?

- Zachary Carroll (DEQ): I don't know that we have percentage but if you start looking at little creeks...we generally only have [water quality data on] the larger bodies of water.
- Darryl Mahoney (AACJ): So half of them you think, or less than that? When we mention that the water quality data may become the problem of whoever's applying for the process, then that [will] have an economic impact on those that

are wanting to apply. I don't see it on this slide you have up there...[In] one of them, the applicant was going to be the person who might need to provide the water quality data and that may be very difficult to do.

- Zachary Carroll (DEQ): Yeah, what we really anticipate on this is that when they're going to be able to get this non-significant degradation, that's typically going to be the larger rivers. And for the larger rivers and streams, we typically do have water quality data on those. If it's a smaller stream where we typically would not have the water quality data, then in most cases we would expect that it would be significant degradation regardless so you probably would go with this second option here [Slide on "Section 8.B.4: Degradation Determination"] where you just go in knowing that there is going to be significant degradation. And so you don't have to do the water quality analysis and just go straight into this alternative analysis and socio-economic impact review just assuming that there will be significant degradation.
- Russell Nelson (EPA): I believe based on the state's—probably your 2016 Integrated Report or 305(b) Report—I think about half of the state's waters are assessed, half are not.

8. [Question] Honorable Darryl Mahoney (Arkansas Association of County Judges): [Regarding] the socio benefits from the water degradation, what length will they be considered? I know that on the economic you mentioned 20 years in there. [Regarding] the socio benefits, how long are we looking? Is that long-term or short-term?

- Zachary Carroll (DEQ): I don't believe that we have any time period specified on that.
- Darryl Mahoney (AACJ): I know [on] the economic benefit there's a 20-year timetable on it, but in the social benefits, is it something that's going to provide some employment for six months, a year? I was just wondering if we needed to attach some time frame to that.
- Zachary Carroll (DEQ): If you knew the time frame on it, that would be something good to include. I don't think there are any limits on how long or short that timeframe could be, at least in the current [version].
- Darryl Mahoney (AACJ): My problem with that is, if you do a degradation and it only results in a six-month social impact rather than a long-term social impact, to me, it would make the degradation be less worthy and I don't know if that's taken into consideration or not.
- Zachary Carroll (DEQ): If we knew the length of it, I think we would take it into consideration.

- Bryan Leamons (DEQ): I think it's a valid comment that we'll make note of certainly.

9. [Question] Ray Wieda (FTN Associates): What are the specific requirements for determining BWQ (number of data points, period of record, etc)?

- Bryan Leamons (DEQ): [This] came up earlier when I commented on the 10% increment and consumption of multiple 10% increments and so forth. I want to point out if somehow we could explain this better, but we have the ability to set protective limits in any regard. Our CPP addresses methods for setting protective limits in cases where you have a lot of background data or none, and those limits are set on worst-case scenarios, minimum low flow as Zach mentioned, or critical flow as it's defined depending on the pollutant. While we do have the ability to track these increments of consumption at a particular location on the map, [and while] we have the ability to track 10% usage and so forth, we also have in place these methods of setting protective limits that ensure you'll never dip below the water quality criteria just from an NPDES permitting perspective, at least maybe not considering some other effects. But at least if you had multiple sources nearby, they're modeled together, they're evaluated together, and those methods set up by the CPP ensure that you do not ever—at least in theory, mathematically, ever cause an impairment at these locations. These discussions and ideas of tracking these increment consumptions or 10% usages, they become less important when you start to look at the way we issue permits at worst-case scenario. That's the realization we came to as we dug through: how do we track, and what is the importance? And so forth. Even in cases where some facility may not try to establish background water quality and just assume degradation [and] they know the stream is not impaired today, after their new permit goes into place, they can rest assured they've got a protective permit that won't cause an impairment later because we had set protective limits by that permit at worst case scenario. [On] most days, streams flow more than in the worst-case scenario [in] which they were evaluated at. I just wanted to mention that when you start thinking on those terms, it makes the tracking a little less important in the long run.

10. [Question] Russell Nelson (EPA): Are you all using EPA's economic guidance to determine the level of socioeconomic impact?

- Bryan Leamons (DEQ): I believe we do. I don't recall specifically. We've got guidance manuals and worksheets included. I don't know how much of that we published with this.
- Russell Nelson (EPA): Just want to make sure because there are a lot of states like New Mexico [who] are using it. We're assisting them with doing that for a variance project for small dischargers. Even though it's somewhat dated, it's a pretty good guidance to follow to determine socioeconomic impact.

11. [Question] Shawn Hodges (National Parks Service): To follow up about the occurrence when no WQ [water quality] data exist: it is assumed to be significant; however, how can we ensure existing uses are being protected since an unknown amount of assimilative capacity is being used?

- Bryan Leamons (DEQ): I was just simply trying to point out that as new permits come in, if they're nearby and potentially have a cumulative effect with another permit, they're evaluated together at the critical flow, and that assures that those locations downstream cannot exceed water quality criteria.

12. [Question] Jason Phillips (U.S. Fish & Wildlife Service): If smaller streams are assumed to most likely suffer from severe degradation (in the absence of existing water quality data) and the applicant proceeds forward with the alternatives and economic analyses, how do you determine what percentage of the assimilative capacity has been used by the permittee (without water quality data)? Who collects the needed data?

- Bryan Leamons (DEQ): If there's needed data, the permittee will need to collect it. But like I was saying, through this process they may choose to assume degradation and accept limits. The way we're directed out of the CPP [is] to assume worst case scenario, but also deciding how much degradation they may be allowed to consume—that's a matter of alternative analysis to get into the decision-making process related to what technology is proposed as baseline, and what technology is out there which may be economically viable and yet also provide an improved effluent limit, a lower degradation through improved technology at an economically-sound ability for the applicant.
- Shawn Hodges (National Parks Service): So how are limits set with no BWQ?
- Bryan Leamons (DEQ): [updated response for clarity] BWQ does not necessarily need to be determined. If degradation is assumed, permit limits are set using CPP methods and the owners move on to alternative analysis to determine the selected technology and social-economic impact.

13. [Question] Jessie Green (White River Waterkeeper): How will the assimilative capacity be calculated for the parameters that DEQ has not adopted numeric criteria for (like phosphorus)? Will you be using any specific numeric criteria in lieu of the state having their own, like EPA's recommended numeric nutrient criteria?

- Bryan Leamons (DEQ): No, we've not promulgated the numeric criteria, for example, nutrients. And unless there's an impairment, we would not have a need to do that.
- Jessie Green (White River Waterkeeper): So it won't be required that they have to produce an analysis of alternatives or economic or social development analyses for any nutrient-related parameters?

- Bryan Leamons (DEQ): Not if there's not ordinarily a limit needed, like in a case where there's an impairment. But if there's no numeric criteria promulgated, no impairment through the narrative criteria, and no technology limit in place, then no.

14. [Question] Justin Stroman (Arkansas Game & Fish Commission): Let's say the designated use of fisheries is impaired and possibly degraded by the issue as of a permit—where does that review occur at DEQ? And obviously it's a professional judgment type of thing, but are the engineers consulting with the fisheries' planning folks or does that even occur? We could help build some sort of criteria or framework for that.

- Bryan Leamons (DEQ): If there is an impairment, then yes, we'd have to evaluate and that [would] be a scientific[ally]-based evaluation on determining what's the appropriate numeric translator, I guess you might call it...We'd have to work with our scientists in office. I appreciate the offer you mentioned. We'd all basically have to work together to establish some sort of scientifically-based translator to evaluate if and what a permit could discharge into an impaired location. Essentially, if there is an impairment, we'd have to consider an appropriate limit. You always have to make sure that you don't issue a permit which may cause or contribute to an impairment if one exists.

15. [Question] Justin Stroman (AGFC): What about existing permits that are already using assimilative capacity and how will they factor into new permits? Will that be reviewed?

- Bryan Leamons (DEQ): Generally speaking...if there are multiple permits, they have to be evaluated together if there's a chance they may impact the same water.
- Justin Stroman (AGFC): The cumulative effect will be looked at, then, for existing permits and new ones. The cumulative effect will be assessed during the new permit, taking into account the existing permits that may have already used up some the assimilative capacity.
- Bryan Leamons (DEQ): If they have potential to accumulate on each other, yes, they should be evaluated together, and that's what we'd have to determine through various types of modeling that are available to the permit writers and other engineers and scientists in our office. There are several routes in which that could be evaluated.

16. [Question] Shawn Hodges (National Parks Service): Only after an impairment[,] nutrients will be addressed? And does this fit with antidegradation?

- Bryan Leamons (DEQ): Yes, it fits in the sense that if there is a criteria to establish a limit or if there is an impairment, a determination would have to be made on an appropriate limit, which would be a baseline limit or a baseline to evaluate the alternatives analysis.

17. [Comment] Teresa Turk (Buffalo River Watershed Alliance): The document doesn't provide any detail into what is adequate to determine BWQ. When and how many samples must be collected, is an average taken? Because BWQ right now is to find as a fixed concentration. But concentrations vary throughout the year. If BWQ is established in the rainy season, concentration may be lower for some parameters at these higher base flows. So if you could provide a lot more information on how you define BWQ, that would be very helpful. Because there are seasonal fluctuations and concentrations will be varied and you've [currently] got it as a fixed concentration. So that implies to me that it's a one-time number that you hone in on, and understanding how that is done would be incredibly important.

- Bryan Leamons (DEQ): I can understand and appreciate the comment. I do acknowledge that there could be some seasonal discussion in there that may or should be made. We'll consider that rather than getting into a lot of ifs right now, but I appreciate the comment and we'll make note of it.
- Teresa Turk (BRWA): Well, I would say that this is probably one of the most important factors: identifying exactly how you come [up] with a BWQ, and having that extremely well-defined and in an example in the document so that it's not ambiguous at all. Understanding that methodology and how you went about it, I think, is incredibly important. So I'd appreciate your thoughtful review on that.

18. [Question] Teresa Turk (Buffalo River Watershed Alliance): When you're going through the Tier 2 assimilative capacity that you just did, it's a very simplistic situation. But you're not really accounting for the error or the uncertainty and as everybody knows, there is huge variability within the data collection and sampling of waterbodies. How do you deal with that? Shouldn't we be much more conservative and also have a great deal of information and doing those kinds of calculations of assimilative capacity?

- Bryan Leamons (DEQ): We still have the ability to set protective limits that are based on critical flow and worst-case scenarios that may go along with those. And really determining baseline water quality can become less of an issue, especially if we're not trying to establish a 10% threshold in an applicant, which may assume degradation and move forward with setting a limit based on worst-case scenarios and using that as baseline technology to begin an alternatives analysis. And the alternatives analysis should result in a better technology with lower limits. My thinking there is, you take some of the variables out of it when we're setting limits and starting from worst-case scenario and moving from there into alternatives.

- Teresa Turk (BRWA): I am concerned because this document is so general and it doesn't seem to be that protective. We have really different kinds of geology throughout the state so some areas need much more protection than other areas and much more of an uncertainty principle, and I was hoping that this document would entail a precautionary approach because we do have a lot of problems with water quality in our state. The other thing that really concerns me too is the lack of reference back to either parts of Regulation 2 or parts of the CPP. So it's very difficult to follow where some of the comments that you're making are actually located within that very large document. So I would really encourage that the more references and links that you could put in the document, the better, because otherwise it's very difficult for someone to follow—even somebody that's gone through the CPP quite a bit.
- Carrie McWilliams (DEQ): This is an evolving thing and this is my interpretation of what Bryan's response was. His point was [that] rather than getting into the trouble and the expense of an evaluation based on background concentrations, what actually drives the buses, just saying [that] we would assume the degradations there and that evaluation, is kind of looking at it in reverse to provide that starting point of [having] a baseline technology or proposing an additional technology, that would reduce it 'X' amount in the total assimilative capacity. And that portion that we're saying that we—or whoever the applicant is—is taking. It's coming from behind rather than ahead because we anticipated a lot of these. The search for the background data would be such an onus on folks. Get ahead of it and pursue it from the perspective [that] it exists.
- Teresa Turk (BRWA): It just seems there's insufficient documentation on how you're coming out [with] this so that somebody from the outside can understand your methodology. So if that could be clarified or enlightened or expanded upon, I would really appreciate it.

19. [Question] Justin Stroman (Arkansas Game & Fish Commission): How do we handle streams listed as category 3 for nutrients, insufficient data? Would the department be conservative in protecting the WQ [water quality]?

- Bryan Leamons (DEQ): Yes, we take a conservative approach, use best available information, certainly if the stream is impaired. We have to set limits based on that designation, otherwise we use best available background information to make our decision.

20. [Comment] Shawn Hodges (National Parks Service): Page 11 shows that existing permits are included in BWQ. Would recommend to enumerate the contribution of permitted sources separate from BWQ.

21. [Question] Colene Gaston (Beaver Water District): I'm going to jump back to some comments earlier about the issue of parameters for which there's not a numeric water quality criteria and, in particular, nutrients. Of course, when we're concerned

about protection of drinking water sources, nutrients are a major consideration. What I understood from what Bryan and others said was that for those situations where there's not a numeric criterion that DEQ's position [is that] there are sufficient permitting safeguards in place to, in theory, protect discharges from causing impairment. Multiple times there was stated that if there's impairment, there would have to be an appropriate limit but we're not focusing here on high quality waters on impairment listings—we don't want it to get to that point. We're talking about antidegradation. So what will be the process to ensure that there's not, for example, nutrient degradation of high quality waters?

- Bryan Leamons (DEQ): Just on surface, the way the antideg structure is set up—and in the guidance document—is based on numeric criteria. So if it's not in place, perhaps there are other ways for evaluation. It's something we can talk about, but I don't know. The way the current structure of the antideg is set up, it's numeric. It's based on mathematical evaluation to set limits and then going backwards from there to determine better technology. So if there's not a number ...in my mind, there's some question of what you would do with a narrative criteria, which may be all you have right now for nutrients. I don't know. I'm open to ideas. What do you have?
- Colene Gaston (BWD): I will get back to you on that, but I do think that it's a very important issue and it's a very significant hole in this whole policy if we don't have something in place to address those situations. So yes, I think it deserves much further consideration and discussion.

22. [Comment] Jessie Green (White River Waterkeeper): I do recommend using EPA's recommended criteria for nutrients. They have recommendations based on Level 3 ecoregions. That would be a good starting place in something to use in the interim—Arkansas promulgating nutrient criteria.

23. [Question] Jessie Green (White River Waterkeeper): At least for a while it was originally considered factoring in a margin of safety whenever calculating the assimilative capacity. Could you talk about the thought process of why that's not being included?

- Bryan Leamons (DEQ): I think it is included. It depends on how they move forward and establish their level of degradation, or assume degradation to move forward with a limit, which establishes the baseline technology. In either fashion, they set those based on minimum flow. Setting limits in methods established by the CPP, they're protective in that they're set at worst-case scenarios. For example, minimum flow on most days of the year depends on the stream, but many streams don't flow at minimum flow much of the year. So, in a sense, there's protection. And then from there the limits set the baseline technology, which you then evaluate for improved technology for more protective limits as better technology is selected. So there are levels of protection built into that process as you move forward.

24. [Comment + Question] Russell Nelson (EPA): [Going] back to where criteria don't exist in the states' standards, whether it's nutrients or whatever, but when you're doing an antidegradation analysis, one of the things you're doing is you're looking at that baseline—what your water quality is at the time of your action. So if you knew what the concentration of that parameter [that] you don't have criteria for, whether there's no EPA criteria or you just haven't adopted it yet, that can still establish a point of reference to determine how much degradation you would allow for that particular parameter. Is that something you've considered?

- Bryan Leamons (DEQ): Perhaps; haven't thought that far into it.
- Russell Nelson (EPA): Just a thought. That's at least one way to do it where you don't have criteria.

25. [Comment] Shawn Hodges (National Parks Service): Would also like to see a time frame for review of this document. The CPP was updated 6 times in the first 16 years and should have been updated well before now (20 years later). Most of these things are tied to Rule 2 (reviewed at least every 3 years) and the Assessment Methodology (reviewed every 2 years).

- Bryan Leamons (DEQ): I would acknowledge that comment. I think we touched on that a little bit last time that some folks were looking for some more certainty on how often the CPP would be examined for updates, and I think it's a good question. I don't know what we may resolve for the document but it certainly—I would at least myself agree—needs to be updated more often than 20 years.

26. [Question] Russell Nelson (EPA): What is your deadline for comments on both the CPP and the AIM, whether together or separate? I've got our permits and TMDL and 303(d) folks all looking at the CPP, and we're going to combine comments and I just want to get an idea of what to tell them when their cutoff is.

- Bryan Leamons (DEQ): We are accepting stakeholder comments right now and this discussion is part of those. So we're making notes and accepting them now, but we anticipate by the end of the next meeting [on] July 21st, we'll at least announce or have a plan put forward for when the 30-day comment—if it's 30 days, I don't know if we're committed to that, but I believe we're going to have a 30-day public comment period. And during that period anyone can provide comments, including the stakeholders or those listening or other interested parties. But we can give you a little more insight to when the 30-day comment period will be. We're discussing that right now. We hope to have that information at the next meeting. We hope to start the 30-day comment shortly after the final meeting.

27. [Question from the chat] Can we clarify the time and details about the July 21st meeting?

- Bryan Leamons (DEQ): We don't have the time yet but, similar to this meeting, we're looking at I think some other activities that day. I don't know if there are any possible conflicts with the EPA WOTUS webinar, but we're considering the best options for timing. We don't have a time set at this time but we're hoping to keep it July 21st.

28. [Comment] Teresa Turk (Buffalo River Watershed Alliance): I've got one comment about the CPP on page 78, [on] the dissolved oxygen parameter. All these other parameters that you have in here like pH and some of the minerals reference back to Reg. 2 because those are numeric criteria, and I don't see that here with dissolved oxygen. It just talks about using this Streeter-Phelps model. So it would be helpful to add a lot more specificity to this parameter and referencing back as you have done in others that are in this section.

- Bryan Leamons (DEQ): We can provide some more explanation to how that developed. Shane, you may have some comment too.
- Shane Byrum (DEQ): We can certainly add the section and the rule to where the DO water quality standards are located.
- Teresa Turk (BRWA): That would be helpful and it would make the document a bit more consistent. And even within the assessment methodology discussion about dissolved oxygen and getting continuous data, there's still some ambiguity about how that calculation is made on a daily basis, so I just want to throw that out there that there's still some ambiguity about that and any more guidance or examples that you could provide would be extremely helpful.

29. [Question] Shawn Hodges (National Parks Service): Page 12 of the AIM has a heading for "Consumption of Dissolved Oxygen Sag". Is there more information on this topic?

- Bryan Leamons (DEQ): Not that we've put out or published and not other than what you see in the AIM. What specifically is the question that we can look into it? Or if they want to provide more specificity to the question.
- Shawn Hodges (NPS): Guess I was wondering what this looks like during the permitting process? [O]r how often will data be available for this to be calculated? More information on the source for this section would be helpful.
- Bryan Leamons (DEQ): We can certainly consider [this suggestion].

30. [Question] Jessie Green (White River Waterkeeper): Does DEQ have a shapefile or other publicly available map denoting what is considered a WOTUS?

- Bryan Leamons (DEQ): No, we do not.

31. [Question] Colene Gaston (Beaver Water District): Back on the procedure that you intend to, at the July or by the July 21st meeting, announce the 30-day public comment period on the antidegradation methodology and the CPP—have you factored in any time to revise those two documents based on stakeholder comments?

- Bryan Leamons (DEQ): We talked about that not long ago, about revision time and when we might make a revision, and it's a good question. I think we'd have to talk more internally, at least with my management, but there is still some uncertainty if we'd make any revisions or go to public notice first because it might be more consistent to hear everyone's thought with one document rather than hear the stakeholder thoughts, make changes, and then put it out publicly and get different thoughts. That's not fully determined, but we may be leaning slightly more towards rolling forward with the 30-day comment period. And then considering updates afterwards.
- Colene Gaston (BWD): Yeah, I guess there are two approaches. My gut feeling is that it makes some sense [that] if you agree with some of the stakeholder comments and you think that revisions would be beneficial, it'd be better to get those changes made before it goes out to a wider public comment process. So I think I would encourage...[that] after [the] July 21st meeting we have some time to get in some written public comments even if it's a short time, because I know you want to get this done. And then you can take those into account and make revisions to have better final documents. I think that that'd be preferable but, in any event, I'm going to make a strong plug for having longer than a 30-day comment period. These are significant and complex documents. We've been waiting on them for years; DEQ's been working on them and we've seen some versions along the way, incomplete versions, and ones that now have changed significantly. So I think that a 30-day comment period is not sufficient to allow for public review.
- Bryan Leamons (DEQ): Okay, on both issues I can understand your perspective, so I appreciate that. We'll talk more about it among ourselves.

32. [Comment] Teresa Turk (Buffalo River Watershed Alliance): In the definition of a waterbody, it doesn't say if that's by HUC code, or reference back to Regulation 2. I just would like a very clear definition of what is considered a waterbody.

- Bryan Leamons (DEQ): We can take a look at that. I don't know if Carrie or Zach, [if] any of you guys might have a comment, but I really don't have much response to that, other than we can take a look at it.

- Teresa Turk (BRWA): There needs to be a scaling in there, if it's by HUC code or if it's [by] the Appendix A in Reg 2. Or there just needs to be something that references back to a map, because otherwise it's just very general. So you don't even really know what you're assessing. So if you all could tighten that up, that would be very, very helpful.

33. [Question] Teresa Turk (Buffalo River Water Alliance): [Regarding] temporary lowering of water quality: what is considered temporary? Is that two weeks, two months, two years? I'm really advocating much more well-defined language than what is in here, because "temporary" could be ten years or fifteen years [for example]. There are no bookends on that.

- Bryan Leamons (DEQ): Are you referring to STAAs, short-term activity authorizations?
- Teresa Turk (BRWA): I'm referring to temporary lowering of water quality; lowering of water quality that is non-permanent effects. So the length of time during which water quality will be lowered. What's the short duration? What's the length of time? It would be helpful for the state to provide guidance on that—some kind of timeframe.
- Bryan Leamons (DEQ): You're reading that language from the antidegradation implementation methodology?
- Teresa Turk (BRWA): I'm reading that language from the definitions in the antidegradation implementation methodology.
- Bryan Leamons (DEQ): I'd have to take a look at that. I'm not sure. Others might be able to comment on that. I, at first, assumed that's referring to short-term activity authorizations, [where] generally the authorization itself spells out what the project is and how long it takes, but I may be on the wrong track. If anyone can guide me on that one, please let us know.
- Russell Nelson (EPA): The EPA has always said that Tier 3 antidegradation can be for weeks, but not to exceed months, and the point is that you don't change the conditions that led to that Tier 3 designation. So it's allowed for things like repairing a bridge, a pot that goes across in a state park. Weeks and months is what we've said.
- Teresa Turk (BRWA): If that language or some reference to that could be put in there, I would really appreciate it. When I read it, I thought it was very open-ended. But if it's weeks and not months, or an example like you just gave, that would be incredibly helpful.
- Russell Nelson (EPA): I think that language is in our water quality standards handbook, the most recent edition.

- Teresa Turk (BRWA): For somebody that is trying to follow all this, we've got a lot of documents, so cross-referencing is extremely helpful.

34. [Question + Comment] Teresa Turk: Is nutrient trading covered in 'activities?' I realized right now [that] we don't have a nutrient trading regulation but we may in the future, and any additional nutrients that would be placed in a stream, I think, would be something that really need to be considered under antideg. And even more so now since there's no numeric criteria, we're left not reviewing or assessing that. I find that really troubling, especially since nutrient trading has been discussed and will probably be back on the agenda here pretty soon. So it would be helpful to say whether it's included in these activities or not.

- Bryan Leamons (DEQ): We can take a look at that and get more firm thoughts on that.

35. [Question] Jeffrey Fore (The Nature Conservancy): Are total pollutant loads being considered as criteria for degradation, as opposed to only pollutant concentrations?

- Bryan Leamons (DEQ): Generally speaking, the way we have framed it and the way we envision it, applying antidegradation implementation is that new loads are what trigger evaluation. For example, if a permittee were to expand an activity, a portion of their plant, and produce more material in some way and that possibly expands a load on a receiving stream, they may put in better technology to basically cut their load back in half to no additional load. And that may cause for no additional review under antidegradation. The trigger for review is additional load. Not necessarily concentration. [But] remember [that] concentration is a huge factor and [in] everything we do when setting limits, writing new permits, etc., we always protect water quality, and concentration is a very important part of limits. [When] determining if something is "new"—a new facility or a new expansion—it's determined on load to the stream [in] pounds per day or pounds for some period.

36. [Question] Justin Stroman (Arkansas Game & Fish Commission): What is baseline? When we talk about establishing baseline water quality data, are we talking about baseline from when this document is accepted and promulgated? Are we talking about when the criteria were established from ecoregion data back in 1987? I think it's important to spell out in these documents. What is the time period of baseline? When does it happen?

- Zachary Carroll (DEQ): As is written right now, it says the baseline water quality will include the pollutants that are already permitted to be discharged from a facility that's expanding. As far as when we determine the baseline water quality, it's currently written in there that whenever the first time somebody looks at a stream for proposed new or expanded discharge, that's when we would go out to establish the baseline water quality for that stream.

- Justin Stroman (AGFC): That answers the question then. So as soon as you apply for the permit, that's when baseline water quality data is established?
- Zachary Carroll (DEQ): Yep.

37. [Comment + Question] Colene Gaston (Beaver Water District): I think there's some of us that disagree with that approach possibly. I'm trying to remember back from some of the earlier stakeholder meetings; my recollection is that at that time DEQ was contemplating a process to go back and evaluate the contribution of existing permittees. That would be counted against the assimilative capacity. Am I correct in recalling it that way?

- Bryan Leamons (DEQ): Perhaps, but I think that may still be in line in some way with what we have today.
- Carrie McWilliams (DEQ): One of the things I just wanted to point out—because I know in the focus group this got to be an issue—if you have a higher baseline water quality, it actually makes the assimilative capacity smaller. The higher the baseline water quality is, the more stringent it'll be.
- Colene Gaston (BWD): I understand the gist of it but again, I think this is an issue that needs some further discussion and explanation.
- Bryan Leamons (DEQ): I'm looking at the next to last sentence and it says “For an expanding discharge, the BWQ shall include the levels of pollutants already permitted to be discharged at maximum design flow” [pg 1 of AIM, under definition of ‘Baseline Water Quality’]. I think the intent is to capture today's water at that proposed expansion location in its current state. That would be the baseline. So any room for additional pollutant load would have to consider that—if those pollutants are already there...But just to acknowledge the comment, I would agree [that] we can continue to look at it if there are improved explanations to be made.
- Carrie McWilliams (DEQ) [via chat]: For a higher baseline [water quality], the TAC [total assimilative capacity] is lowered. This effectively is more conservative when evaluating a Tier 2 water through the antideg process.

38. [Question] Shawn Hodges (National Parks Service): If a permit is already present, would the BWQ already be calculated?

- Bryan Leamons (DEQ): I don't know exactly what they're getting at, but the BWQ should include the levels of pollutants already there. Or potentially there through permits.

39. [Question] Erin Scott: So the BWQ changes (is re-evaluated) each time a new permit application is undertaken, correct?

- Bryan Leamons (DEQ): Potentially. That goes back to what we were saying before. Permits may be there and their limits got put in effect because critical flows were evaluated under the methods of the CPP, and so the limits are in place. So any multiple-permits-scenario would model or evaluate water quality effects based on cumulative effects of multiple permits. The BWQ may not necessarily be evaluated if each of those assumed degradation each time. There may or may not be a BWQ evaluation. If that's how the review went, it may have gone straight to assume degradation and then evaluation of socioeconomics and alternatives analysis. To answer the question: not necessarily. There may [potentially] not be a record of BWQ for the last application. We'd have to tease through the scenario of how the review process went and what the file records show.

40. [Question] Colene Gaston (Beaver Water District): For existing discharges that are not proposing to expand, will DEQ go back the next time the permit is renewed to do an antidegradation review? If one [an antidegradation review] was never done, will one be done for those existing discharges that are not expanding upon their first renewal once the antidegradation implementation methodology is in place?

- Bryan Leamons (DEQ): A renewal only, with no additional load, does not trigger additional review under this AIM.
- Colene Gaston (BWD): This is what I was thinking, that there was some consideration during previous discussions about setting up a process even for renewed permits without increased loading to go through the antidegradation review.
- Bryan Leamons (DEQ): That's just not the way it's set up. If they're not proposing expanded load, we aren't applying a trigger at this time. Just renewal only is not intended to [trigger antidegradation review].
- Colene Gaston (BWD): I understand that's the position, but the idea was that since they never had a review—even though it was required by law—that the first time they're renewed after this policy is in place that they go through that process.
- Bryan Leamons (DEQ): I see what you're getting at. I wouldn't say they didn't get considered under the Reg. 2 policy, [which] was in place. If they were permitted, I have to assume they were evaluated... They are permitted a certain way, so I don't see what would trigger [the review]. That's where we've ended up, [that] additional load would trigger it, not a renewal only. So if they are permitted, they will continue to hold a permit. I will say [that] getting the original permit and continued renewals every five years, they should have and were continued to be evaluated by the CPP under those methods. All those protective methods spelled out by the CPP were evaluated and reevaluated. So they should, and they better,

have a protective permit to protect the water quality of the receiving stream. Our position right now is that unless there's a trigger—which would be more load—we're not going back through this [particular] AIM procedure.

- Colene Gaston (BWD): I understand that. I just think this is a comment that we will continue to make because while there was a review done on the permitting to determine whether there was potential impairment, I don't believe that there was actually a true antidegradation review done even though that boilerplate language was in all the past permits.
- Randy Easley (Arkansas Water and Wastewater Managers Association): Just a note to Colene's comment, there doesn't appear to be a documented Anti-deg review of previously issued permits.

41. [Question] Shawn Hodges (National Parks Service): Would it be beneficial to use the data requirements in the assessment methodology as a starting point for determining BWQ? But being sure to stay away from the shifting baseline syndrome.

- Bryan Leamons (DEQ): I don't have a strong comment on that. I'd have to talk more with the assessment folks to look at that language and consider the comment. If you've got more discussion on that, please send it in.

42. [Question] Colene Gaston (Beaver Water District): Do we have anything else on the agenda today in terms of DEQ presentations? Are we just now down to stakeholder comments?

- Bryan Leamons (DEQ): We're just in the open forum on either the CPP or antideg, so if you've got questions or comments, go forward.
- Colene Gaston (BWD): What are your thoughts for the July 21st meeting, just to get an idea of what we're covering?
- Bryan Leamons (DEQ): It's going to be largely open-forum, as needed. There were stakeholders earlier [who] had said they may need more time [for] our continued discussion. I don't know that we'll need more time than the 3 hour-meeting we've got proposed for next time. But the idea is to provide as much time as needed in these meetings to talk about any new ideas anyone might have. But we're also open to you guys, if you've got a format suggestion. We're considering at this time [to] maybe highlight some of the key areas that have been brought up and offer most of the time to the stakeholders for questions or comments. We welcome any ideas.

43. [Question] Colene Gaston (Beaver Water District): In the definitions, there are several references to waters of the United States [WOTUS], [which] itself is not defined. But the definition of waters of the state says that for purposes of the antidegradation implementation methodology, waters of the state include those waters meeting the federal definition of WOTUS. But then the definitions for ‘water quality standards,’ ‘pollution,’ and ‘pollution of concern’ refer to WOTUS...My fundamental question is, What's DEQ's intent on permitting going forward? Are you going to strictly be issuing permits based on the federal definition of waters of the United States?

- Bryan Leamons (DEQ): NPDES permits obviously have to be permitted for waters of the US and we have to permit waters of the state through some type of permit. I guess some of those details remain to be seen.
- Russell Nelson (EPA): Pretty much every state’s definition of ‘waters of the state’ has always been more expansive than the federal definition of ‘waters of the US,’ and with the revision to the waters of the US rule, federal waters or jurisdictional waters are even more limited. I posted a link where there is some information [<https://www.epa.gov/nwpr>]. There are also some webinars available and I think I put a link to that as well. There are several challenges to the rule right now, and there has already been a legal decision—I believe it was in Hawaii. The discharger could actually avoid limits by moving a discharge to something that is not a water of the US, thereby avoiding a federal permit. So it really falls to the state to protect their waters where we don't have federal jurisdiction.
- Bryan Leamons (DEQ): That's a great comment, Russell, and I appreciate that. I'm glad you said it, I wasn't really wanting to get into all the challenges and so forth and trying to predict the future, but you are right that ‘waters of the state’ in Arkansas is far more expansive than ‘waters of the US’ [WOTUS], and Rule 2 applies to the surface waters of the state. So we would have to permit—presumably a permit that looks just like they do now, in a lot of ways at least. But what title goes on those permits—if that's NPDES or something else, we'd have to figure that out. I didn't want to go too far predicting the future though. I would have to defer to Dr. Blanz for further comments. I don't know if he's still in the meeting. I know he had to leave earlier.
- Zachary Carroll (DEQ): Yeah, Bob [Blanz] had to go to another meeting already.

44. [Question] Jessie Green (White River Waterkeeper): [In regards to] WOTUS – in the absence of a national database differentiating intermittent vs. ephemeral streams, how will DEQ distinguish these waterbodies?

- Bryan Leamons (DEQ): We'll distinguish them through the guidance that's being discussed in some of the webinars that Russell mentioned. I've attended some of those webinars and nationally there's a plan, but we will determine what is applicable as the future comes.

45. [Comment] Colene Gaston (Beaver Water District): My recommendation would be that the definitions that seem to be limited [to] the location of this to waters of the United States—that that be deleted. If you need to say anything, it's 'waters of the state' for the reasons that have been previously discussed.

- Bryan Leamons (DEQ): Okay, we'll look into that.
- Colene Gaston (BWD): [Also in the definitions of] 'pollutant of concern,' 'water quality standards'—there are others, I haven't marked them all but any time those definitions seem to refer to beneficial uses...There are a lot of places where it seems to limit the application to 'waters of the United States.'

46. [Question] Jason Phillips (U.S. Fish & Wildlife Service): Will the July 21 meeting cover additional AIM material or be a repeat opportunity to discuss the same topics?

- Bryan Leamons (DEQ): We don't have any additional presentation material. If someone has particular questions of interest, we may touch on some new topics. But we presented this today in a way to cover it and invite comments or questions. We don't have a presentation planned for next time yet. But if there are additional areas you find as you go through these documents and you find areas we haven't expanded on or details we need to get into, we can at least deal with questions or considerations, and possibly provide some answers or direction as we see it. But no new grounds to cover next time. Unless someone brings it up.

47. [Question] Ross Noland: AIM, par. 4(C) states "proposed new or expanding activities may proceed, but with no net increase in parameter load." By definition, if a new or expanded activity requires NPDES permitting, then it will involve new or expanded pollutants. Under what scenario could a new or expanded discharge pass Tier III review?

- Bryan Leamons (DEQ): For Tier 3 review...if I recall [correctly], none. It wasn't intended that Tier 3s are to be permitted for additional load.
- Carrie McWilliams (DEQ): Yeah, the Tier 3s—they're early on in the process. There's no additional load that's increased. That's not to say you couldn't do other things, but they would just not have any increased load on the stream.
- Bryan Leamons (DEQ): They would have to be a form of—I don't know if we use this word—non-degrading option. Provide some way they could expand and not increase the load.
- Ross Noland: Like what "things?"

- Carrie McWilliams (DEQ): A no-discharge situation would be one. Obviously, that's not applicable everywhere in the state, but that's certainly something considered.
- Bryan Leamons (DEQ): I know we talked about that—some sort of non-discharging permit or some type of routing of their effluent to another waterbody.
- Carrie McWilliams (DEQ): I would imagine there are ways to further minimize loadings through technologies.

48. [Question] Teresa Turk (Buffalo River Watershed Alliance): If an applicant had a Reg. 5, which is a non-discharge permit, I believe, and discharging into a Tier 3 waterbody, the antidegradation review and implementation would not be required. Is that correct?

- Bryan Leamons (DEQ): The antideg would not apply to a Reg. 5 permit because it's a non-discharging permit, the way they're set up.
- Teresa Turk (BRWA): Even though they may require an NPDES permit? Do I have that incorrect? I thought some Reg. 5s required an NPDES permit.
- Bryan Leamons (DEQ): No, Reg. 5 in Arkansas is not an NPDES permit. Those farms you're referring to, those liquid animal waste systems, may be permitted under appropriate Reg. 5 permits in Arkansas. They are not NPDES permits.
- Teresa Turk (BRWA): So if there is a new confined animal feeding operation [CAFO] that is under Reg. 5 and not Reg. 6, and discharging or not discharging but is in proximity to an applying manure...close to a Tier 3 stream—the antidegradation review and implementation would not apply to that situation. Is that correct?
- Bryan Leamons (DEQ): Right, because they are not allowed to discharge.
- Teresa Turk (BRWA): Theoretically. I think that's a giant loophole in this process. So please note my concern about that.

49. **[Question]** Colene Gaston (Beaver Water District): On [page 8 of the AIM](#): on renewals, what is subject to review or not and it says [that] they will not be subject to AIM review if “there are no proposed changes [to the facility’s effluent] which would result in significant increases of pollutant loadings. That to me is different than the definition under ‘activities,’ where it says “proposed new or expanded NPDES permits. It seems to apply some level of expansion. Is there a difference between what it says on Page 8 in the definition of ‘activities’ to which this applies? It seems to qualify what expanded loads get review because it says ‘significant increases’ in this. So what qualifies as a significant increase in loading that requires antidegradation review?

- Carrie McWilliams (DEQ): I think one of the reasons that was in there is the way we evaluate [some] industrial discharge—they aren't evaluated on design flow, they're evaluated on production. And our permit engineers have a way to evaluate production to determine whether or not it's significant. So an actual change might be occurring in the facility, but when we don't consider it significant, we—in essence—don't change the permit limits. They might say, “our production went up” or “our production went down,” and [then] we [the permit engineers] run it through the calculations and we determine that it is, by our definition, not significant. We don't change those. In essence, you're not having any change in load, and that was my first thought when I saw that and that's probably what that's talking to. That's not to say [that] that shouldn't be cleaned up or clarified, and there might be some additional significant types that it's referring to.
- Colene Gaston (BWD): I think that would be helpful—some further consideration on this. I think an argument can be made that any increase in loadings, and if that's industrial permit where it's an increase in production, that that should trigger the review. I also have a question...when municipal permits come out for review where their original permit limits were based on the facility design loadings...and their actual flow is well below the design flow—when those permits are reviewed, I think there's an argument to be made that they should go through antidegradation review because we don't want to degrade our existing high quality waters. And if they've been discharging at half of design flow, then there should be a review of what's going to happen when they go up to the flow at full design.
- Bryan Leamons (DEQ): [Regarding] first the comment, I understand and appreciate the perspective. Just to clarify, we had intended the review to trigger and apply to increased load when compared [to] the future permitted potential. So it wouldn't apply if someone was running a facility slightly under design flow. But I can certainly see the point being made. That's just where we landed today, but we'll consider that comment.

50. [Comment] Randy Easley (AR Water and Wastewater Managers Association): Some additional clarity on the terms significant increase in pollutant loading; significant degradation; and significant lowering of water quality would be appreciated.

- Bryan Leamons (DEQ): It may be related to some of Carrie's discussion about at least having a definition that would fit any possible scenarios that may come up, but we can look into it.
- Zachary Carroll (DEQ): I think the significant lowering of water quality and significant degradation were more specific to whenever we're looking for that 10% of that assimilative capacity—those definitions in particular, I think that's what those were for.

51. [Comment] Teresa Turk (Buffalo River Watershed Alliance): One last suggestion for our next meeting in a couple of weeks: I think what would be very helpful to me and possibly to other folks is that many of us may have made a lot of comments today and in previous meetings. If ADEQ had time to go through and place those comments in each section—just so we have a running tally of things that you're going to respond to or consider. What I'm suggesting is, for example, in Section 5A if there was a comment made that you all could make a note underneath there maybe in red, or if you've made any revisions, you could make a red-line revision that we could have prior to our next meeting. I think it would help us get further down the road a little bit and have more substantive conversation.

- Bryan Leamons (DEQ): Thanks, I appreciate that. We can try to compile—and we continue to compile, by the way—the meeting notes and comments. And in some form we plan to document each of these notes, but we'll see what we can do especially by the time of next meeting. Good comment.

52. [Question] Russell Nelson (EPA): In reference to a discharger that is under design capacity on a Tier 3 water. Are they allowed that 10% or not?

- Bryan Leamons (DEQ): Under this plan as it stands, they are not allowed a permitted increased load.
- Russell Nelson (EPA): That's what I thought, and that would be consistent with what we would recommend so I just wanted to check.

53. **[Comment]** Colene Gaston (Beaver Water District): I would like you guys to check and then consider in terms of what some of the prior stakeholder comments were about nonpoint sources. In [40 CFR 131.12\(a\)\(2\)](#), the last sentence before you get to the smaller subsections says “Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.” So it does seem to me that there needs to be something in this policy that talks about Reg. 5 review, that “all cost-effective and reasonable best management practices for nonpoint source control” are in place.

- Bryan Leamons (DEQ): We do understand the perspective and will certainly consider the comment it. It's not lost on us. We did spend some time on that and we'll continue to spend some time on that. I can just say for now [that] we acknowledge the comment.
- Russell Nelson (EPA): On that point, [40 CFR] 131.12(a)(2)—it does not require a state to establish BMPs for nonpoint sources, but EPA interprets that same reg. as requiring states to adopt an antidegradation policy that includes a provision that will assure that cost-effective and reasonable BMPs [are] established under state authority. That actually goes all the way back to 1994. So there is a clear requirement for that in antidegradation implementation.
- Bryan Leamons (DEQ): No doubt, no arguments here. It's that “assure” that remains up for some discussion when many of those programs are managed by entities other than Department of E&E. That's an area we'd spend a lot of time on and will continue [to]. But definitely good point, Russell.

54. **[Comment]** Bryan Leamons (DEQ): [Regarding the next meeting on July 21st] We don't have a time set but we anticipate it would be about three hours and largely more open forum and discussion. Just for now, I anticipate we would bring some high points to the table. Some of the key items brought forward—I don't know if we need to discuss them all in greater detail or not—but we can certainly walk through at least a short summary, if not more. But the point of the last meeting for now [that] we're planning is to provide more open forum or more opportunity to bring more discussion to the table. What I would like to do is task everyone to go back and review the CPP and the Antideg Implementation Methodology in their current draft forms. Through it, compile any more discussion items you may have. If you have any, prepare to speak to those at the next meeting. But if you have any suggestions as far as formatting, or major items for discussion for the next meeting, feel free to email that to the email address that we had provided and is on the website [CPP-antideg-comments@adeq.state.ar.us]. Meanwhile we'll be planning for the last meeting and we'll be providing a schedule and information as we move closer to that, as it will be on July 21st.

55. *[Comments from chat regarding Zoom meeting link not working on the CPP/Antideg website]*

- Colby Ungerank (DEQ): We have confirmed that [it] didn't work and we are aware that it did have the correct meeting ID number and everything. We're not sure where the disconnect is, but we will be looking at that. Maybe just possibly displaying a meeting ID number for you to go to zoom.us and type in that meeting ID number. But we will work on making it convenient to be able to go from our website to [the] meeting for next time.
- Bryan Leamons (DEQ): I apologize for that and we'll figure out a better way to get that out there. Meanwhile our staff internally will be preparing for the next meeting.