Anti-Degradation Pre-Rulemaking Meeting #4 - Cumulative Impacts, Alternatives Analysis, Socio-economic Justification Analysis, & Public Participation

March 30, 2010 – Skylight Conference Room, Waterbury, VT

Overview

Cumulative Impacts (Christy Witters)

- Gina Campoli – What is the definition of a cumulative impact? There is a federal definition which is very specific (NEPA).
    - Pete LaFlamme – It means you need to take into account all the different impacts: point, non-point and what their total impact is on the assimilative capacity (ASCAP) of the waterbody.
- Kim Greenwood – What is the physical area we are considering? Watershed, reach, wetland?
    - Pete LaFlamme – It depends on the situation. In the case of a stormwater impaired watershed it would be the whole watershed draining to the point of the impairment.
- Bill Bartlett – (In reference to criteria used by other states to assess projects) Does a 10 or 20% reduction in ASCAP apply to total or remaining?
    - Pete LaFlamme – The remaining ASCAP.

Socio-economic Justification and Alternatives Analysis (Christy Witters)

- Gina Campoli– How do you do the economic analysis on the alternatives?
    - Christy Witters– A 110% rule is used by some states. It requires the permit applicant to implement mitigation practices if it doesn't add more than 10% to the total project cost.
    - Gina Campoli– But how do you do this if you haven't done the socio-economic justification (SEJ)?
    - Christy Witters– The 110% rule can be used to jump the SEJ analysis altogether if the project uses mitigating practices.
- Gina Campoli – Is there an accepted methodology for doing a SEJ?
    - Christy Witters – We haven't come across any guidance yet.
- Mark Lucas – As I understand it, an SEJ would be worked into a general permit when it was developed and an individual project would have an individual SEJ.
    - Padraic Monks – Yes, but I don't think every individual permit should have to complete an individual SEJ. Projects can get kicked into an individual permit process for many reasons.

Application of Cumulative Impacts to Individual Programs

Stormwater (Padraic Monks)

- Bill Bartlett – How do you deal with cumulative impacts where stormwater discharges are mixed with other kinds of discharges?
    - Pete – It's a good question. Doing it purely based on science may be a (near) impossibility. We will have to simplify and make some assumptions.

- Andrew Geffert - Is it possible that an individual stormwater permit might still meet the criteria in terms of the general permit?
    - Padraic Monks – Yes. For example, a project may need an individual permit because they are using a new type of BMP.
- Anthony Iarrapino – I am having trouble understanding how you can push the SEJ to the front end of a general permit when the analysis requires site specific information.
    - Pete LaFlamme – The general permit relies heavily on the adoption of the BMP manual. The SEJ is done on a statewide basis by deciding where the bar is going to be by setting the level of treatment required.
    - Christy Witters – That's what is important about cumulative impacts – it allows us to go back and re-evaluate if those BMPs are being effective.
    - Jon Groveman – I thought that the goal was to know what the assimilative capacity is and to avoid the SEJ for most of the projects. I don't know how you know what the assimilative capacity is.
    - Pete LaFlamme – I don't know how you determine assimilative capacity in a stormwater situation. In wastewater treatment system, there are a set of conditions (low flow, etc) under which you can easily measure the water quality and this becomes the basis for the SEJ. It is hard to measure assimilative capacity in stormwater because there are such variable conditions under which to evaluate many small projects. We have to simplify and use surrogates. With a BMP approach we are looking at the SEJ of a level of stormwater treatment practices.
    - Jon Groveman – I understand what you are saying, but I am not sure if I agree. I think you have to remember what Bill said, that there are different stressors, and we don't want the water becoming impaired because of mixed reasons.
    - Pete LaFlamme – At the end of the day we have to write a rule that has a procedure to assess projects in real time. There isn't much guidance in the region or nationally, so we are looking for ideas to develop a thorough but workable process.
    - Anthony Iarrapino – I think it is good to look beyond wastewater program, because I keep hearing that wastewater is no longer a water quality problem, that stormwater is now the biggest concern.
    - Pete LaFlamme – I think we can agree to the spirit of assimilative capacity and we don't want to automatically let water quality drop to the minimum in order to meet water quality standards.
    - Bill Bartlett– If we take the BMP approach, then we have to assume that the BMPs will be consistent with anti-degradation. It was my understanding that the BMPs were only designed to protect the water quality standards.
    - Pete LaFlamme – The BMPs were selected to protect anti-degradation.
    - Bill Bartlett – Doesn't anti-degradation say that you can't reduce water quality *at all* unless you meet certain criteria? I don't think that the current manual has been successful at preventing impairments (phosphorus in Lake Champlain is being added more and more every year from stormwater sources)
    - Padraic Monks– The lake was impaired before stormwater regulations came into play.

- Kevin Geiger – You have to assume that the entire state gets developed to the same level as the project you are evaluating. If you are using a general permit approach, you have to assume that the activity you approve on the parcel in question would be allowed on all parcels in the state. You can't use the same BMPs in a watershed that has 15% impervious as a watershed that only has 9%.
- Padraic Monks– I don't think that you can use % impervious as a BMP. Impervious percent is not necessarily the only indicator of assimilative capacity.
- Andrew Geffert – So, in summary, you might have a certain set of BMPs for watersheds at different levels of impervious percent.
- Kevin Geiger – I am hearing conflicting ideas: on the one hand you need to generalize so that every minimart doesn't need to spend $50,000 on an SEJ, but on the other hand every watershed is different.
- Anthony Iarrapino – I am still not comfortable with the idea of general permits for anti-degradation, but it sounds like that there are ways to come up with smaller regional general permits to achieve efficiency without hurting water quality.
- Pete LaFlamme– The concern is not just efficiency, but the science, or lack thereof. The general permit is a set of standards that is applied to individual sites.
- Anthony Iarrapino – It seems like the discussions of manual standards and anti-degradation are converging, and I don't see that discussion happening here.
- Mark Lucas – Isn't the scientific uncertainty built into the margin of safety?
- Pete LaFlamme – A margin of safety usually deals with that percent of development that is untreated. The scientific uncertainty we are referring to is figuring out a starting point which to measure a specific site against.
- Harriet King – I am hearing a lot of buzzwords and fuzzy concepts that I am having a hard getting my head around. Where is the assimilative capacity?
- Pete LaFlamme– Assimilative capacity is the space between what the current water quality is and what the minimum standard. Uses are things like cold water fisheries, which have associated criteria (like D.O.) that set the minimum. In writing the rule we are trying to write clear procedures.
- Gina Campoli – We are trying to take these scientific and policy issues and force them into permit schemes. How are you going to do that?
- Pete LaFlamme – The concept of BMPs are a necessary assumption that are used on a national level.
- Gina Campoli – How can you avoid placing the burden of fixing a pollution problem on the last polluter, when they are not the only one causing the problem? It's not like you can go back and get earlier polluter.
- Padraic Monks – We are doing that in the impaired waters.
- Harriet King – Do you ever deny a permit to a project because the assimilative capacity has already been used up?
- Padraic Monks – The project may need to offset their stormwater discharge.
- Anthony Iarrapino– There are other programs that are going on in ANR that will help solve these problems. I think the Agency is earnestly wrestling with these problems in the

stormwater impaired waters and hopefully that will result in less severe water quality problems.
    - Bill Bartlett – If you are going to go a general permit BMP based approach, I would suggest multiple general permits so to fit individual projects better. I think you could tailor those permits to fit with other programs as well (e.g. stream stability).
    - Jeff Nelson – I think this overall approach makes a lot of sense. The risk evaluation already in use might be a way to implement anti-degradation.
    - Kim Greenwood – I disagree. I don't think that it is working if 90% of applicants can score as low risk. It passes on the Agency's responsibility to the applicant.
    - Padraic Monks – Whether or not the construction permit is working aside, I do think we can use that framework as a model.

River Management Program (Mike Kline)

- Gina Campoli – When you do an alternatives analysis how do you decide what the purpose of the project is? The purpose of the project will frame the alternatives.
    - Mike – I think it's integral to getting to the point of doing an alternatives analysis. The immediacy of the conflict frames the alternatives. The alternatives for a project where a house is endangered will be different than an area where someone just thinks the stream should be straighter.
- Bill Bartlett – I don't see anything on your slide about protecting biota.
    - Mike Kline – We do consider habitat change. We feel managing the physical habitat is the most direct way to deal with the many different impacts.
- Bill Bartlett – When you are faced with a situation where you have to allow an activity that isn't the best for the stream, do you ever require an offset?
    - Mike Kline – We do, although I can't say we do it for every project. We look for opportunities to upgrade structures to lessen the encroachment (Vtrans and bridges for example).
- Andrew Geffert - You tend to regulate only the larger streams (anything over 10 sq mi watershed). Will anti-degradation have any bearing on that threshold?
    - Mike Kline – There is a bill in the legislature to remove that threshold. We do look at smaller watersheds in 401 certification. If we apply anti-degradation, we wouldn't confine ourselves to watersheds that meet the thresholds. We currently provide our services to anyone who needs them, regardless of threshold and I hope that this will continue.

Wetlands (Alan Quackenbush)

- Jon Groveman – I know the program has wrestled with cumulative impacts in wetlands, but it hasn't really taken off. Do you see that you will use anti-deg to finally tackle cumulative impacts?
    - Alan – Yes, when we have a new rule we will change the application to make the applicant provide information on cumulative impacts that we will review.

Shoreland Encroachment (Susan Warren)

Wrap Up

- Harriet King – what do you see as the process going forward? It is my understanding that at the next meeting you will present what you have put onto paper so far, which will generate a lot of discussion. Do you foresee more informal discussions?
    - Pete LaFlamme – these meetings are all part of pre-rulemaking. Eventually we will go into rulemaking which has a formal process. We will probably never reach complete agreement, but some time we need to get out of the informal process.
- Anthony Iarrapino - As someone who has advocated for the commencement of the formal process, I want to thank the Agency for this process and the ability to discuss these issues with the program people, rather than just one person (the general council).
- Jon Groveman – I want to second what Anthony said. I have also heard many concepts for the first time today so I hope there will be an opportunity before the formal rulemaking takes place for the stakeholders to digest and give feedback on some of these concepts. Would there a possibility to get EPA's reaction to our preliminary work?
- Pete LaFlamme– we have been having discussions with EPA concurrent with these meetings.
- Anthony – I think it would be important to share that information with us, even if they are not giving you clear direction or getting push back from other sources.