Compensatory Mitigation and the Watershed Approach

Questions and Answers

General questions

1. Mike Rolband, Wetlands Studies and Solutions, Inc.: (To Zedler) What did the NRC committee mean by watershed scale? How big a watershed, how small a watershed for locating projects on a watershed scale?
    - Joy Zedler, UW: It was a pretty big step to recommend that there be a watershed approach, but didn't go into details on watershed scale. The scale of the watershed has to on the nature of the resource, (e.g. depends on things like proportion of watershed that is wet, how many potential restorable wetlands, and where are the impacts of the permits are being felt).

2. Peggy Strand, Venable LLP: The two presentations together may indicate a top down federal, MAP-type strategy/guidance may not fit with the bottom up science and state/local strategy that is going on. So do you need guidance from federal agencies first or wait until the plans develop first?
    - Susan-Marie Stedman, NOAA NMFS: Have to think about this within the context of rule, which can only address so much and may not be able to include all of the ground up strategies. A regional watershed plan approach is probably implied in the rule because the rule indicates what is necessary to do a watershed approach for just one permit, and if you are going to go through the work to do a watershed plan for just one permit, then it might be more effective to plan on a regional scale.
    - Response Strand: Seems like a lot of research and innovation going on, and the concern may be that the proposed rule may restrict this.
    - Joy Zedler, UW: Should be demonstration watersheds throughout the country and the process could be tried to see how it works in different places. Then could come up with 20 case studies as templates, (e.g. some privately owned, others public land, some wetland rich, some wetland poor). This may be instructive, all we need is money.
    - Stedman: The proposed rule will probably not be an impediment to watershed groups coming up with different plans. But, we can't keep on going on doing what we are currently doing. The best thing would be to have watershed plans, but in the interim, until plans are developed, the proposed rule is attempting to make things better.

Questions about how to implement the watershed approach

3. Julie Sibbing, NWF: (To Stedman) Could you explain the role that regional general permits would play in a watershed planning context?
    - Susan-Marie Stedman, NOAA NMFS: The general sense is one way to put time and effort into the planning that is required to prioritize wetland

restoration sites is to develop regional general permits. So projects that applied for permits and proposed mitigation consistent with the regional general permit would have an expedited permitting process associated with it. This would be an incentive for people to come together to develop watershed plan or regional restoration priority list and as result of all the work the permitting process would be easier (e.g. similar to special area management plan).
    - Response Sibbing: The public agencies may want to do it because it would provide better flood control, water quality etc.

4. Kelly Burks-Copes, Corps: (To Stedman) Are any of the new tools described in the MAP (e.g. GIS tools and Checklists) available now or are any being developed for a watershed approach, or are you relying on existing tools like the GAP analysis program.
    - Susan-Marie Stedman, NOAA, NMFS: The MAP group is not developing any of these tools right now. But, if you go to the report on Compensatory Mitigation and the Watershed Approach (ELI) you can see what was available two years ago.
        - Jessica Wilkinson, ELI: There were two publications prepared as a result of that Forum, 1. a report summarizing the symposium itself; 2. a report prepared in advance of symposium; literature review on examples of tools and approaches for making restoration (not all regulatory) decisions in a watershed context; looked at all different federal agencies and summarize how they approach watershed; cases studies on tools and approaches that have been used to prioritize wetlands and streams for protection (e.g. Ainslie on EPA approach, Klimek NC approach).
    - Response Burkes-copes: ORM is trying to create watershed approach, a mapping capability, and are looking into tools that are out there and are able to be used. When will MAP ramp back up?
    - Susan-Marie Stedman, NOAA NMFS: The plan is to wait until rule is final.

5. John Ryan, Land and Water Resources: (To Zedler) Bankers often use similar parameters when prioritizing bank sites, as the UW students used in their project. The process includes looking at, soils maps, floodplain maps, etc. Should we describe this process of locating bank sites to the IRT? And, can this process be a watershed approach?
    - Joy Zedler, UW: Can't speak for the regulators, but there are valuable approaches out there. Why do this information gathering over and over and not compile this information and build on each other's effort. This effort shouldn't be piecemeal, it would be better if the process were coordinated and archived.
    - Response Ryan: Studies aren't always perfect, and if there is an incentive for a mitigation banker to find a site they will find it.

6. Bill Ainslie, EPA: (To Zedler) How does your approach for siting restored wetlands in the watershed based on primary function (e.g. putting wetlands to restore flood attenuation and water quality lower in the watershed and to restore biodiveristy higher in the watershed) fit in with an approach like HGM that looks at wetlands as entire entities with multiple functions?
    - Joy Zedler, UW: When siting wetlands may consider *primary purpose* not single purpose, which means strive hardest to get a wetland to serve a primary purpose while still maintaining its wetland qualities (not one purpose wetlands). But, some things aren't compatible (e.g. like in nutrient rich area plant biodiversity goes down). So if want to maximize nutrient treatment function might impair plant biodiversity. A healthy watershed has to reduce flooding, nutrient filter, and high biodiversity, and maybe all these things can't be maximized in the same site, so need a variety of sites. (See Frontiers in Ecology and Environment and National Wetlands Newsletter articles for clarification).

7. Doug Norris, MN DNR: How would a watershed approach be implemented in a regulatory way in those watersheds that are still very high quality, where there are few impacts? How is the watershed approach implemented in very high quality and high percent wetlands watershed?
    - Susan-Marie Stedman, NOAA NMFS: First and foremost want to replace function and area loss, want to do some kind of restoration to replace impacts. But, sometimes want to protect land in threatening situations, and need to prioritized protection ahead of restoration. The place to protect these lands might be in action plans, etc.
    - Response Norris: What are regulatory agencies going to require in a watershed approach in areas where there are few threats (and high % wetlands, 70% public land, and nothing to restore) in order to get mitigation for impacts that might occur in those watersheds.
    - Response Stedman: In regulatory contexts have to deal with what is practicable, in areas where little area to restore than might get pushed to protection.

Specific Questions about the WI student study

8. Bill Gilmore, NC DENR: (To Zedler) How much time went into student study at UW? How much of their time was in the field, and how much was spent doing GIS?
    - Joy Zedler, UW: There were nine students, and much of their time was devoted to learning the process. They had a 2 hour seminar once a week for 14 weeks (multiply by 9 people). For the summer they worked half time for 2.5 months. A lot of the time was spent in the learning process. But, this was a serious effort, comparable to a thesis research project.

9. Robin Mann, Sierra Club: (To Zedler) For the UW project, the students prioritized water quality concerns. However, could they have included biodiversity concerns if given more time?

- Joy Zedler, UW: The students actually did look at the biodiversity concerns by looking at the number of threatened and endangered species, and talking to experts about plant diversity, which allowed them to locate the places that biologist value as resources. And they may have had GIS layer for the biodiversity issues so they did consider that.

10. Peggy Strand, Venable LLP: Although the student project was good, they still did not come up with a watershed plan. They brought together a lot of science and data to have information.
    - Joy Zedler, UW: yes

11. George Howard, Restoration Systems: Is the increase in the area of ponds that has occurred in the absences of a watershed approach the result of compensatory mitigation or unplanned compensatory mitigation?
    - Joy Zedler, UW: This is from US FWS update on the status and trends of wetlands in the US in the past 6 years. We have gained 700,000 acres of ponds, maybe not all with mitigation.
    - Response Howard: Very rare for ponds to result from mitigation
    - Response Zedler: Not true, ponds do result from mitigation.
    - Response Howard: Is the fraction of ponds that result from mitigation very small?
    - Response Zedler: That was not included in the study.
    - Response Howard: these types of data should be included in your presentation (e.g. the proportion of ponds due to mitigation).
    - Response Zedler: Ponds was the type of wetlands that increased the most, it was a very significant increase.
    - Michael Thabault, USFWS: The report was not meant to attribute the source of how the wetlands were generated. It was purely a status and trends report.
    - Response Howard: This presentation should clarify that, and not imply that the ponds were the result of unplanned mitigation.
    - Response Zedler: Clarify that, the increase in ponds was the result of unplanned restoration.