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Date: Wed, Jan 28, 2004 5:50 PM

Subject: Re: Experimental flows - WAPA proposal: follow-up questions

AMWG members and others,

We recently received a request for additional comment on the WAPA flow proposals (see message below). Although Clayton stated that the information was not needed prior to the conference call tomorrow, I am providing it for the sake of completeness in our discussions on this topic. Talk to you tomorrow.

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"CLAYTON PALMER" <CSPALMER@wapa.gov>
01/23/2004 05:08 PM

From: <Clayton Palmer>
To: <jeffrey_lovich@usgs.gov>, <sgloss@usgs.gov>, <tmelis@usgs.gov>
cc: <Norm_Henderson@nps.gov>, dkubley@uc.usbr.gov
Date:
Subject: Re: Experimental flows - WAPA proposal: follow-up questions

Hello:

OK, I've muddied the waters and I'm sorry.

WAPA is NOT revising its proposal. I was inquiring about the sensitivity of food base impact to the magnitude of the minimum flow on Sunday in response to a question brought to me by Mark Steffen. I withdraw the inquiry.

As if that weren't enough, I further muddied the waters by throwing in some questions that USBR was researching answers for. Specifically:

- 1) what is the incremental impact of WAPA's proposal on HBC in the Grand Canyon ecosystem? and
- 2) what is the incremental impact to "the food base" in the Grand Canyon ecosystem of WAPA's proposal?

I stated to USBR that the answer to the first question was implied in GCMRC's response. After all, GCMRC reported that WAPA's proposal does as much in terms of non-native fish suppression as last year's design. Maybe more. USBR stated that, since it is responsible for compliance and consultation under ESA an implied impact is not as good as a direct statement. A direct statement is what USBR requests.

Regarding "food base": again, there is no direct statement and, while not an ESA issue (unless its linked to HBC), it is a resource of concern.

The AMWG conference call is scheduled for next Thursday. This information is NOT needed for that call, but may be the subject of a question by AMWG members. It IS however, desired by USBR before it makes a decision one way or another, and that decision will likely come soon after the AMWG call.

Before leaving, let me say that both USBR and GCMRC have been helpful in responding to WAPA's request. In particular, GCMRC clearly runs an impartial science center and I complement them for that.

THX

Clayton Palmer

From: Jeffrey E Lovich
To: Clayton Palmer
Date: 01/22/04 03:28 PM
Subject:

Clayton,

I was out of the office when your message arrived, and thus unable to respond to your ambitious deadline. In the future I request that we receive a formal request giving us more time to consider the issues fully. I don't want to compromise our ability to give your questions thorough consideration under the full glare of science that is available.

Regarding your proposed modification to the flows, our response remains the same as in the document I submitted prior to the last TWG meeting (posted on the AMP web site). However, our concerns relative to consistency in experimental treatments would be increased because of the potentially cumulative effects of the changes. We will not have replicated the FY03 flows if the proposed modifications are implemented so this weakens our overall power of inference. We could compare the mortality from the modified 04 flow with the flows in 03, but we won't have replication. Whether this weakness is worth the savings achieved under modified flows is a decision that the AMWG will have to make.

I hope this response is helpful.

"CLAYTON PALMER" <CSPALMER@wapa.gov>
01/20/2004 12:53 PM

To: <jeffrey_lovich@usgs.gov>, <sgloss@usgs.gov>, <tmelis@usgs.gov>
cc: <dkubley@uc.usbr.gov>, <LWHETTON@uc.usbr.gov>, <RPETERSON@uc.usbr.gov>
Subject: Experimental flows - WAPA proposal: follow-up questions

Jeffrey, Steve & Ted:

Regarding WAPA's proposed change; Mark Steffan (sp ? - TWG rep for the fishing guides), indicated that "food base" impacts may be better with slightly high Sunday flows. I replied that WAPA's proposal is intended to supply low flows all day on Sunday in order to provide lethal temperatures over redds, but we could change it to a steady 6,500 cfs instead of our current proposal of 5,000 to 8,000 cfs. I mentioned this at the last TWG meeting.

At the end of the day, the USBR needs to make a decision about whether and how to change the NNFS portion of the experiment. Could you help by providing your professional judgement on the question: Given a low flow regime Jan-March on Sunday. Will the purposes of the experiment be better served by a 5 to 8 kcfs regime, a steady 6.5 kcfs regime, some other that uses the same amount of water? An answer to this would help USBR. We understand that an answer to this may be: "we can't discern".

Also, in conversing with USBR, Dennis and Randy indicated that their decisions would be help out if GCMRC addressed the issues of impacts to 1) food base, and 2) HBC. That is: your evaluation of impacts of the WAPA proposal (as against the currently operating regime) appeared to be limited to sediment transportation and fish suppression, but did not specifically address food base (for trout and HBC) and HBC themselves.

Please call or e-mail, Dennis, Randy or myself if you have questions and for a clarification of the information USBR would like in order to complete its deliberations.

Thanks for your time and cooperation.

Clayton Palmer

CC: <tmelis@usgs.gov>, <hfairley@usgs.gov>, <sgloss@usgs.gov>, <mjliszew@usgs.gov>, <cfritz@usgs.gov>, <smankiller@usgs.gov>, <dkubly@uc.usbr.gov>, <norm_henderson@nps.gov>