

Re: Draft Annual Update of Risk Level (appendix F) - NPS Expanded Non-native Aquatics Management Plan - request input

Ward, David L <dlward@usgs.gov>

Tue 7/27/2021 10:04 AM

To: Healy, Brian BH <Brian_Healy@nps.gov>

Brian,

Whatever you want to do is fine, and I do not necessarily think you have to make any changes. I like the idea of just strengthening some of the carp language until we have a bit more data. I just wanted to get my 2-cents in for you to consider on some of those species.

Thanks,

David W.

From: Healy, Brian BH <Brian_Healy@nps.gov>

Sent: Monday, July 26, 2021 4:01 PM

To: Ward, David L <dlward@usgs.gov>

Subject: Re: Draft Annual Update of Risk Level (appendix F) - NPS Expanded Non-native Aquatics Management Plan - request input

Hi David,

These are great comments and insights. I really appreciate your thoughts on these species, and your work is extremely helpful. I'd be glad to make the changes you suggest. Maybe the best approach for carp is to add/strengthen the language under "future research" with a few details you mention below. That allows for a good placeholder for next year. I'm going to try to update these more regularly.

Also, your rationale for green sunfish risk level changes are solid, and I'll check back in with Ken to make sure he's okay with that (I don't see why not). I could cite your Ward/Vaage 2018 paper for that change, and do you mind if I cite you "personal observation" for the flathead catfish?

Thanks again!

Brian Healy
Native Fish Ecology and Conservation Program
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Flagstaff, AZ 86001

Brian_Healy@nps.gov
928-638-7453 (while teleworking 970-471-3407)

From: Ward, David L <dlward@usgs.gov>

Sent: Friday, July 23, 2021 12:40 PM

To: Healy, Brian BH <Brian_Healy@nps.gov>

Subject: Re: Draft Annual Update of Risk Level (appendix F) - NPS Expanded Non-native Aquatics Management Plan - request input

Brian,

Thanks for the opportunity to review and comment. Your summaries look great! I had just a couple of comments related to flatheads and Green sunfish that I put on the risk level update document for you to consider (attached).

My only other thought is related to common carp. We have been doing some lab studies to quantify the negative effects of common carp on HBC eggs and larvae and I have been astounded at how effective carp are at wiping out HBC eggs. They could be having a much larger impact than we previously thought. I am working on writing that stuff up for publication and need to collect one more spawning season worth of data ---but it might be worth adding some wording in there somewhere to indicate recent laboratory research indicates negative impacts of common carp on humpback chub larvae may be quite high and may elevate the risks posed by this species.

Thanks,

David Ward

From: Healy, Brian BH <Brian_Healy@nps.gov>

Sent: Wednesday, July 14, 2021 7:13 AM

To: Ward, David L <dlward@usgs.gov>; drogowski <drogowski@azgfd.gov>; rmann <rmann@azgfd.gov>; Yackulic, Charles B <cyackulic@usgs.gov>; Young, Kirk L <kirk_young@fws.gov>; Pedersen, Kerri <kpedersen@usbr.gov>; Fullard, Clarence D <cfullard@usbr.gov>; Gwinn, Jessica E <jessica_gwinn@fws.gov>

Cc: Hyde, Kenneth J <Ken_Hyde@nps.gov>; Billerbeck, Rob P <Rob_P_Billerbeck@nps.gov>; Haas, Sarah K <Sarah_Haas@nps.gov>; Palarino, Rosa RAP <Rosa_Palarino@nps.gov>; Omana, Emily <Emily_Omana@nps.gov>; Schelly, Robert C <Robert_Schelly@nps.gov>; Trammell, Melissa <Melissa_Trammell@nps.gov>

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Hi All,

We would appreciate your feedback and input on a few changes to an appendix (F) in the NPS Expanded NNF Management Plan that outlines the risk each species poses to native fish in Grand Canyon NP and to rainbow trout in Glen Canyon NRA. The plan allows for annual review and updates of this appendix. I've developed a short paper explaining the changes that I've proposed for each species, which are based on new information related to distribution, abundance, and science related to threats. It is important to keep this information up-to-date to inform our management response in case new invasions or changes in abundance occur.

If you can, please provide feedback by August 1.

Thanks so much,

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