Colvin, Mike

From: Mike Colvin <colvin.mike@gmail.com>
Sent: Tuesday, March 21, 2017 10:20 PM
To: Colvin, Mike
Subject: Fwd: North American Journal of Fisheries Management - Decision on Manuscript ID UJFM-2016-0213
Attachments: Review.pdf

---------- Forwarded message ----------
From: **North American Journal of Fisheries Management**
<onbehalfof+david.geist+pnnl.gov@manuscriptcentral.com>
Date: Tue, Mar 21, 2017 at 10:11 PM
Subject: North American Journal of Fisheries Management - Decision on Manuscript ID UJFM-2016-0213
To: colvin.mike@gmail.com

21-Mar-2017

Dear Dr. Colvin:

I regret to inform you that our reviewers have now considered your paper but unfortunately feel it unsuitable for publication in North American Journal of Fisheries Management. The reviewer comments are included at the bottom of this letter, along with those of the associate editor who coordinated the review of your paper. I hope you will find them to be constructive and helpful. You are of course now free to submit the paper elsewhere should you choose to do so.

The associate editor and I believe that the two reviewers provided a fair assessment of the paper's shortcomings. The associate editor also provided a considerable number of comments and recommendations. If you decide to revise the paper, I would encourage you to make corrections based on these comments. I would not be opposed to you submitting a revised paper to NAJFM as a new submission as long as you completely address the comments. I believe that addressing the comments will result in a substantially different paper that will be best handled as a new submission. If you decide to submit back to NAJFM, go ahead and include the comments and a point by point response to the comments.

Thank you for considering North American Journal of Fisheries Management. I hope the outcome of this specific submission will not discourage you from the submission of future manuscripts.

Sincerely,
David Geist
Editor, North American Journal of Fisheries Management
david.geist@pnnl.gov

Reviewer(s)' Comments to Author:

Reviewer: 1

Comments to the Author
See attached review (review.pdf)

Reviewer: 2

Comments to the Author
This article is a worthwhile contribution (the fairly extensive data set and model development) to an important topic (translocation transport of adult salmon- spring-run Chinook salmon). However, the model results are a little underwhelming and the paper would benefit from some improvements to presentation of the model but the latitude to do that is likely fairly limited. One way to help compensate for this, and beneficial regardless, is to have more easy to interpret, plain language in the discussion regarding the most important results and the more important limitations. This should include being more clear about the relative roles of truck size, fish density, versus a combination thereof as the number of truck hauls seemed like a confusing way for managers in other location to determine the best protocols. Related to that, please be clear if the current density guidelines are too low. Also with this would be some graphs of ave. water temperatures (daily over the course of a migration season) in the river below the trapping sites during the study years (or at least a typical year) to provide better context for pre-trapping thermal experience, and along with that some data on the actual temperatures in the trucks (degree days is great but readers would benefit from seeing the actual temperatures). Time of exposure in air would be nice to include if available or at least discuss as important factor to consider and data to collect, and related to this the pros and cons are a least potential impacts of using CO2 as a tranquilizer for collection. The biggest limitation/weakness of this study in my judgement is the lack of post-release survival data. In my experience, most of the fish that will die due to translocation would die after release (within about 24 to 48 hrs) and not in the truck. The authors need to discuss this and suggest this as an area of future study (such as through tagging or snorkel surveys) and mention the distinction/implications of whether truck-mortality is correlated proportionally with post-release mortality or not. Finally, I think a more accurate title would be: Identifying optimal translocation trap and haul protocols given factors associated with adult spring-run Chinook salmon translocation mortality.

See attached file (marked_up_version.pdf)

Associate Editor Comments to the Author:

1. My biggest issue with this manuscript is that the study completely ignores the fish (not one mention of fish condition or type). You seem to have assumed that all fish are the "same" and that the only things varying are what you measured. Clearly, translocation mortality can be a result of variables associated with the fish including such factors as whether the fish are hatchery or wild, sex, size (e.g., biomass in the tank may be more important numbers), condition of the fish (is it fungused for example), maturation level. In the extreme, a truck full of females might intrinsically have a very different mortality rate than a truck full of males. I believe some information or data on the fish is essential. I would like you to provide information on the fish (e.g., defend why they are the same) or defend why you do not think this information is necessary.
2. Another major concern I have is that the study considers mortality as only what died in the truck or what somebody thought might die (I assumed this nearly dead was defined as a moribund fish but this was never defined). However, mortality could be delayed and occurring after fish are released and being able to track that might give a very different perspective on what factors are affecting translocation. Mortality factors killing fish in the truck could be different then delayed mortality. I know this could be a challenge to assess but it is not even mentioned in the text that I could find (even as a discussion point).
3. I do not think that you have an experimental design or study in that nothing was manipulated. You just got what you got from the trucking operations and then tried to make sense of it. So, what you call hypotheses are really more expectations. This work is not really hypothesis testing, in my opinion. While I do not have a problem with the approach, you should call and it treat it like it is and not call table 2 hypotheses.
4. Line 339. You state here that your work encompassed a wide range of variation in conditions. It is hard for

me to verify this statement since there was little data provided. I question whether your design in fact gives you enough variability in some of the parameters. For example, for Foster Dam, I noted the trip number averaged 1.3 with a SD of 0.6. This means most of the days had only one or two. I read in the text that 37% of the trips were more than one. All this says to me that most days had one trip. How can you properly evaluate effects of numbers of trips in a day (see Line 490-497) when most trips are one.
5. Extension of results. It is not clear to me how far your results can be extended to other trap and haul situations. The two dams seemed to behave differently in terms of what affected mortality and then they redid the one dam after your study so how far can you extend results with a completely new translocation set up. If I had never seen this study or any other on translocation work, I would assume lower densities and time involved trapping and hauling were critical. And that is what you found. While I think verifying this is fine, I would like to see something more. For this to be most useful, their needs to be some general principles that can be extended to other translocation situations. I was hoping you would generate some graphs that show density, temperature, time relationships that could be more universally applied in other translocation situations. Is it possible to generate such widely applicable results from this work or be really clear about what can be extended beyond the Willamette.
6. I had a very difficult time reading and following this manuscript. One issue was the excessive amount of methods (see below). There was so much time spent on the modeling description that I got the impression that was more the purpose of the work. Another issues for me was the manuscript would talk in general terms for a bit (not distinguishing dams), then flip to talking about individual dams and then go back to being general. I had a hard time following this changing context in places.
7. I thought the abstract was extremely weak. One issue was how generic it was. There was not a single number or value. It was almost like it was written before you knew results of the study. For example, the last two sentences are more about what you were going to do as opposed to what you did.
8. I thought the methods were really excessive. I realize you want to report what you did but I found that there was almost more emphasis on methods and much less on results. There were nearly 11 pages of methods. I had a hard time tracking whether all of the methods were actually carried through in the results. I would really recommend you streamline their methods.
9. Results. I would like to see more basic results of the study and see them clearly presented. This would help the reader interpret and understand the modeling. For example, are the results on lines 331 and 332 annual numbers trapped and hauled. If I understand line 335 correctly this is the number of fish lost in a year (0 to 28, for example). Or is this loss per haul. I do not know. Table 2, at the top, says the number of mortalities were 0 to 4, which I assume is per haul (I do not know however). How many hauls were made during each year at each dam. Again, more basic data on results of this study should be clearly and concisely presented. And really helpful.
10. Line 340. I have no idea what the phrase "outplant occasion" means. It is used in table 4 as well and I could find no definition for this phrase. Could this be outplant location. Neither phrase was defined, however, especially in Table 2.
11. Table 4. I do not know what the values on the far right mean and why they are useful to have. I do not know what to make of them.
12. Figure 2 and 3. I did not understand how to interpret these figures. What does the grey area mean? Also, why was Figure 2 restricted to one dam and those four variables.
12. It is curious to me that in a study of trucking fish, not one result or value of dissolved oxygen levels was presented. I would think that DO levels are really critical to the fish being hauled. While I know temperature and DO are inversely related, the relationship in this case could be heavily dependent on other factors such as number of fish being moved. I would really like to see some DO data or a discussion about why it is not important and so was not measured.

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