

FINAL MINUTES OF THE AAHTC MEETING ON SUBJECT OF SHEEPSCOT POND FISHWAY

A conference call was held from 1 to 2 pm on 23 FEB 2017. Participants included John Coll and Patricia Barbash of the USFWS, David Bean of NOAA, Cem Giray and Bill Keleher of Kennebec River Biosciences, Michele Walsh the State of Maine Veterinarian, Debbie Bouchard with the University of Maine Cooperative Extension and Aquaculture Research Institute, Mike Brown and Marcy Nelson of Maine DMR, and David Russell and Todd Langevin of Maine IF&W.

On the question of increased disease risk associated with opening passage to alewives and river herring: The consensus of the group is that the open water source (lack of filtration and UV) at the hatchery is already a major risk. Because migratory species are currently coming into contact with the open water source at the hatchery, opening of the fish way for the entire year rather than just for 10 months of the year would not represent a significant increase in risk for introducing a disease of regulatory concern. Ich was mentioned as an example of “nuisance” disease organisms that are encountered by having open, untreated water supplies and having associated increased operations costs via needed treatments. Trish and John asked IFW about Ich at the facility and suggested that UV would not only tackle the bait issue but also remove any potential Ich problems.

The consensus from the group was that the hatchery should add filtration and ultra violet light treatment. David Bean of NOAA mentioned “section 6” funding from NOAA or USFWS. If a disease were to be introduced into the hatchery, the biomass of the hatchery could amplify the disease agent and thus put wild stocks, including endangered Atlantic salmon, at risk. The best way to mitigate the risk is to prevent disease from getting into the hatchery. It was mentioned that funding for UV infrastructure could likely be a good match for some of the grant programs available. Follow up information after the meeting; the NOAA grant has closed for 2016 and the USFWS section 6 funding was primarily focused on habitat improvement projects for 2017. NOAA Restoration Center funding may be available for a redesign of the intake with better screening to prevent juvenile alewives from entering the facility through the intake. It was encouraged by NOAA to seek Federal Funding Opportunities and should be investigated further to assist with facility upgrades.

On the subject of testing wild populations: Several members of the group expressed concern that limited testing of wild populations could potentially give a false sense of security. Debbie mentioned that testing wouldn’t hurt and suggested that confidence only comes with time and more data points. Michele warned about the potential harm in getting a negative and then having a false sense of security. She said to consider the long view with population monitoring. Bill Keleher felt a negative doesn’t always mean negative. There are lots of variables. Debbie Bouchard said that a testing regime to quantify risks could be designed. The group seemed to be split on whether or not information from disease testing of wild populations would be of use.

On subject of disease risks such as VEN and other minor disease agents: Risk was not viewed as being increased due to the current “open” state of the water source. Any questions of VEN and pathogens become irrelevant with appropriately sized UV. There was little discussion of VEN specifically, because it fell into the realm of what was already discussed and the suggestion that UV treatment be prioritized. Bill Keleher mentioned that disease screening may be best focused to keep screening to the worse of the worse (OIE reportable and major pathogens of regulatory concern). He cautioned about not “setting the needle” for action too low.

On topic of closing the pond to use of bait and keeping the fishway closed year round: Several members said that they would not be comfortable stating that risk for the hatchery would be reduced with such operation. Others felt the historical lack of pathogen detections at the hatchery were not due to the present closure schedule of the fishway. Some of this discussion came after Todd Langevin suggested that the multi-decade record at the Palermo SDH of no diseases of regulatory concern being detected in screening may be the result of the current seasonal

fishway closure practices. Patricia Barbash mentioned that the pooling of alewives below a closed fishway could be viewed as a factor for increasing risk. Such pooling results in stress and if a disease agent is present, the stress could result in a disease outbreak. Animal activity and migration of eels, which can bypass a closed fishway, could easily introduce diseases present below the fishway passage into the pond. They felt there was not enough historical data on the wild populations and made general statements that large populations have potential to increase pathogen risk "dose makes the poison". Davis Russell mentioned that Trish brought up a good point about pooling of fish below the fishway in that if migratory fish numbers up to the fishway are to be enhanced from downstream removal of barriers, the risk for Sheepscot Pond and the hatchery could increase regardless of fishway operation practices.

Alewife numbers and risk: Mike Brown mentioned that annual alewife numbers could build to tens of thousands after a decade. It was acknowledged by someone in the group that large fish populations moving through a system could have more pronounced pathogen transfer. All AAHTC members present agreed that the water source needs to be treated and that the risk is already high, regardless of the fishway. Only IFW and DMR did not express an opinion. Debbie B. stated that large populations can increase risk, but doesn't see where IF&W has been protected by closing it off. Michele W. stated that higher numbers can equal higher risk, but don't know the true risk without data. The lack of a problem at the hatchery is not likely because of the fishway closure. Trish Barbash there is always going to be a risk, but no more than fish that are passing through. The fishway is not the only risk. Open water source is the problem. Cem G said fish are already intermingling. Bill K - untreated water is the big risk regardless of opening because you already have migratory species coming in contact – open water source is the problem.

Conclusion: The recommendation of the AAHTC was that the opening of the Sheepscot Pond fishway did not constitute a significant added risk over current practices and that installation of UV treatment at the Palermo State Fish Hatchery should be prioritized to protect the hatchery water supply.