

January 9, 2007

Dr. Ron DeHaven, Administrator
Animal and Plant Health Inspection Service (APHIS)
U.S. Department of Agriculture 1400 Independence Ave, SW
1400 Independence Ave, SW
Room 312-E
Washington, D.C. 20250

Dear Dr. DeHaven:

I am writing to you on behalf of the Sault Ste. Marie Tribe of Chippewa Indians (Sault Tribe) in response to the recent Federal Order issued by USDA-APHIS, which prohibits the interstate movement of the 37 species of live fish in an attempt to prevent the range expansion of Viral Hemorrhagic Septicemia (VHS). This letter is a follow-up to the letter previously provided to USDA-APHIS by the chairperson of Sault Tribe on October 30, 2006. This letter will also be made part of the meeting record at the January 10 USDA-APHIS sponsored public meeting in Romulus, Michigan, which will be attended by one of our staff.

As USDA-APHIS will be initiating the development of an Interim Rule, we wish to express our views concerning that process. We hope our comments will help in the development of a reasonable and fair solution that minimizes the risk of range expansion of VHS without unnecessarily negatively impacting the agencies and businesses that participate in fish transfer activities.

Sault Tribe supports actions that prevent, deter or slow the spread of harmful fish pathogens in the Great Lakes, but we strongly suggest such actions need to be developed and implemented in concert with all affected government jurisdictions. Although we offer independent comment at this time, we wish to stress that we fully participate in, and support, the Joint Strategic Plan for Management of Great Lakes Fisheries (Joint Plan). The Joint Plan is implemented under the auspices of the Great Lakes Fishery Commission, and provides the infrastructure for achieving consensus-based actions on Great Lakes fishery management issues, such as VHS.

One of the inter-agency structures established under the Joint Plan is the Council for Lake Committees (CLC), which is composed of upper level fishery managers from each of the Great Lakes states, tribal organizations, and Ontario. The CLC draws upon the experience and expertise of each of the Lake Committees, Technical Committees, and the Great Lakes Fish Health Committee. The CLC is in the process of developing guidance for addressing VHS, and we are confident that the CLC will develop appropriate and fair recommendations for respective agencies to consider.

Throughout its history, the CLC has discussed and addressed many issues related to fish health, including such concerns as new pathogens, early mortality syndrome (i.e.

thiamine deficiency), and impacts of invasive species. Some of these have proven to be detrimental to fish health on a continual basis, while others have been “incorporated” into the norm of mortality sources for Great Lakes fish populations. With regard to VHS, the CLC recognizes that the long-term impact of VHS on Great Lakes fish communities is highly uncertain at this time, as is our ability to contain or control it. Thus CLC has elected to defer recommending drastic action until more information on VHS is collected and analyzed.

If the Interim Rule is to proceed, several issues should be addressed in that process. These include; consistency of purpose, acknowledgement of scientific uncertainty and the risk associated with unintended consequences, justification of economic impacts, and clear articulation of the basis of concern regarding the spread of VHS.

CONSISTENCY

The Interim Rule should be consistent in its intent and purpose. For example, consistency should be maintained when setting rules for susceptible species, geographic boundaries, private industry, government agencies, etc. “Consistency” would also require that all geographically isolated pathogens of concern be addressed – not special rules just for VHS.

We feel all species of equal risk should be included in the “susceptible species” list. We find it curious when a quick reference search finds the reference for both the Coregonid family and lake trout being susceptible to VHS, yet only the coregonid family is placed on the USDA-APHIS susceptible species list (Smail, D.S. 1999). In addition, if the species whose cell line is most sensitive to VHS is indeed the fathead minnow, then first-principal reasoning suggest it should be a candidate for the susceptible species list, especially due to its popularity and widespread geographic distribution. These and other issues regarding the current susceptible species list all suggest a thorough review of the list is warranted. We suggest this review include Great Lakes fisheries biologists.

Since VHS has been in the lower Great Lakes since 2003, and was most likely here for some time prior to detection, it is reasonable probable that there has been sufficient time for VHS to have expanded its range outside the Great Lakes basin and Great Lakes states. The most notable example is the large number of emerald shiners, which subsequently tested positive for VHS, that have been transported out of the Niagara River system to all parts of the country. Again, in order to maintain consistency, the regulations that are applied to the Great Lakes states regarding fish transport should apply to states nationwide. The chance of VHS being transmitted from northwestern Minnesota to southwestern Wisconsin (both out of the Great Lake Basin) is less likely than fish being transferred from West Virginia to Kentucky (both much geographically closer to infected waters). Since thousands of fish transfers have already occurred in and out of states surrounding infected waters, the virus may have spread well outside the Great Lakes basin. The possibility of nationwide surveillance should be seriously considered.

The most glaring inconsistency in the emergency order relates to ballast water exchange practices. This inconsistency is especially ironic, considering there is a strong possibility that ballast water discharge was the means by which VHS entered the Great Lakes. Unquestionable, ballast water remains a primary vector for; introducing new pathogens, introducing new invasive species that can impact the health of native flora/fauna in the U.S., and transporting VHS to other jurisdictions. Simply stated, ignoring ballast water as a primary vector, destroys the credibility of USDA-APHIS' rational and justification for implementing special restrictions regarding VHS.

We again question why APHIS did not take such aggressive emergency actions in other similar recent situations, such as whirling disease in the Rocky Mountain states, or EEDv or *heterosporis* in the Great Lakes. Also, since VHS has been found throughout the lower Great Lakes and St. Lawrence River system why isn't the state of Maine, along with other affected East Coast states, included in the emergency rules?

Lastly, we question why there are no susceptible species from the aquarium trade listed? The best current theory suggests *heterosporis* was introduced into the Great Lakes through this trade. Surely the aquarium trade should be considered a vector for VHS movement and action should be taken to reduce the risk of this trade spreading VHS.

SCIENTIFIC UNCERTAINTY

In developing the Interim Rule, scientific uncertainties surrounding this issue should be considered. Fishery managers always seek additional data and information; unfortunately however, managers often must make decisions with many unknowns. We feel the following questions identify some key scientific uncertainties, which are currently hampering sound decision-making. We encourage APHIS to dedicate resources to address these questions.

Were the VHSv positive catfish and coho salmon samples determined using a validated technique? If not, this information should be cast in the proper light and all appropriate screening techniques should be validated.

How is VHSv transmitted from fish to fish?

How does a fish move from the susceptible, to the carrier, to the infectious state?

How well does egg surface disinfection work on non-salmonids?

What is the current geographic range of the pathogen?

What is the full spectrum of susceptible species?

How well do species susceptibility trials done in the lab translate to open water systems?

How much seasonal variability of infection is there?

How does water temperature affect susceptibility or the ability to accurately determine positive and negative samples?

Is VHS type IV as lethal as other strains of VHS? Was VHS determined to be the cause of death in the freshwater drum and muskellunge die-offs in the lower lakes or was the virus just found to be present in those die-offs? Why haven't die-offs of salmonids in the lower lakes, specifically Lake Ontario been observed?

UNINTENDED CONSEQUENCES

Will the proposed actions or rules increase the probability of unintended negative consequences? For example, we are worried that if Great Lakes minnow species are prohibited from harvest, an increase in exotic minnow imports will certainly increase the chance for additional invasive species being introduced in to the Great Lakes – including new fish pathogens.

We are also concerned that the current rules actually increase the change of spreading the virus to currently uninfected waters by allowing intrastate movement of fish from an infected water body to an uninfected water body. Managing aquatic pathogens should be done on a watershed basis, not by state or region.

ECONOMIC JUSTIFICATION

Since most rules prohibiting transportation of fish will have serious economic consequences, it will be important to weight those consequences against the effectiveness and likelihood of the rules being successful in restricting range expansion of VHS. The negative impacts associated with new regulations will be obvious and perhaps severe, whereas, the intended economic benefits of those regulations are less obvious, and may not occur or even be a consequence of the Interim Rule. For example, if inter-state transport of wild bait harvest in the Great Lakes is prohibited, a multi-million dollar industry will be immediately and severely impacted, yet the likelihood that such regulations will be effective in preventing the spread of VHS is highly uncertain. Furthermore, if the objective of the Interim Rule is to simply slow the inevitable spread of VHS, then consideration of the economic impacts of the Rule becomes imperative. We feel it is unacceptable to impart serious economic hardship based largely on a “chance” the action will prove effective, or that an action might merely “slow” the event from eventually occurring. Therefore, we urge APHIS to thoroughly evaluate both the efficacy and consequences of any new rules prior to implementation.

BASIS FOR CONCERN

Is the basis of concern regarding range expansion of VHS justifiable, given the fact that VHS has already colonized the lower Great Lakes, and has likely spread to other waters that have received Great Lakes fish in recent years? Given the unusually rapid response by USDA-APHIS regarding VHS, the lack of consultation with states and tribes, and the many inconsistencies with the emergency order, it appears that outside interests have pressure the federal government into unilateral and premature action. It also appears that USDA-APHIS acted without properly evaluating the true risk to the environment or outside fisheries-related industries. If outside interest groups are demanding restrictive actions be taken to curb the spread of VHS, then we expect those actions to be properly supported by scientific data.

The Great Lakes Fish Health Committee recently held an emergency meeting (11/06) and developed a comprehensive set of recommendations for member agencies to review.

Therefore, we are confident that the CLCL will adopt appropriate guidelines after considering all aspects of this issue. We would expect your agency to incorporate these guidelines into the development of the Interim Rule.

In conclusion, and as stated in our letter to you dated October 30, 2006, the Great Lakes Fish Health Committee, and the Council of Lake Committees have initiated various actions to properly address the VHS concern. We believe these organizations would be willing to work with ASPHIS to better understand the potential impacts of VHS on fish in both wild and hatchery environments. We believe the lack of consultation with these and other Great Lakes governments and groups resulted in unnecessary hardships, failed to affect meaningful control or minimize the spread of VHS within the Great Lakes Basin, and did little to prevent the virus from spreading outside the basin. More importantly, however, if the Interim Rule development process is pursued, the status, risks, and impacts associated with VHS need to be completely documented – and the objectives of the Interim Rule clearly articulated – to ensure that the Rule is consistent, effective, and fair in achieving its stated objectives.

Thank you for your consideration in this matter.

Sincerely,

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