



January 15, 2021

## Happy New Year from the Water Quality Section of AFS!

After the surreal events of the past week, we look forward to a return to normalcy in the coming year(s). Please renew your AFS membership if you have not already. Students and Early Career memberships are free. AFS will not be mailing paper renewals this year. Instead, you can print your own invoice: log into your AFS account and go to My Dues & Subscription tab, click "print renewal invoice" button. That printable invoice becomes a printable receipt when dues are paid off.

### Updated Section By Laws

Why are they called 'By Laws'? The Governing Board, guided by alumni Bob Hughes and Margaret Murphy, has revised the By Laws to reflect changes in the way we conduct business and to clarify roles and responsibilities of section officers. We are also proposing a new elected position as Communication Officer, described below.

### Upcoming Elections!

In June the Water Quality Section will be having elections for two office positions. Becoming an officer is a great way to be more involved with the American Fisheries Society and facilitate the protection and improvement of the water resources that our fisheries depend on.

The two positions are **President-Elect** and **Communications Officer**. The President-Elect is a two-year position that leads into two years as President and finally two years as Past-President. As President-Elect, the incumbent serves on the Elections and Audit Committees and performs the duties of the President in their absence. The President develops a two-year work plan and budget, prepares the agenda for and presides at Section meetings, serves on the Elections Committee, appoints all committees, and serves as an *ex officio* member thereof except as limited herein. The Past-President chairs the Elections Committee and special committees at the behest of the President. The communications officer is a two-year position that can be elected for consecutive terms. The role of this position is to serve as the point of contact for communication-related platforms. As such, they will maintain the list-serve, social media accounts, website, and web-based meeting accounts (if needed) and

perform other functions that require technological expertise and continuity.



If interested you are interested in either of these positions or wish to nominate someone else, please to contact Paul Kusnierz ([pkusnierz@alumni.nmu.edu](mailto:pkusnierz@alumni.nmu.edu)) or Henriette Jager ([myjgoo@gmail.com](mailto:myjgoo@gmail.com)). We are happy to answer any questions.

### Consortium of Aquatic Science Societies (CASS)

A meeting of the Joint Aquatic Sciences is being planned <https://aquaticsocieties.org/event/aquatic-sciences-meeting-2021/> with participation from AFS.

### Annual AFS Meeting – Baltimore, Nov 6-10

With any luck, the annual AFS meeting will be in Baltimore with the theme Chesapeake headwaters to estuary <https://afsannualmeeting.fisheries.org/2021-annual-meeting-in-baltimore/>. Future meetings are planned in Spokane, Grand Rapids, and Honolulu.

### Symposium proposals

We are aware of one proposal so far. Reach out to the organizers if interested.

### Planning for Coldwater Fisheries Resources: Modeling and Managing Temperature Impairments

Organizers: Paul Kusnierz and Jonathan Leiman.  
Cosponsored by WQS and Habitat Sections.

Water quality impairments come from a variety of pollutants and can impact the ability of fisheries to persist as defined by the Clean Water Act. Thermal impairments are particularly detrimental to coldwater fisheries and are increasingly challenging for state environmental and natural resource agencies to manage. Thermal impairments are often caused by



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human driven alterations of hydrologic regimes by the expansion of impervious surfaces, agricultural production, and riparian deforestation. Through addressing thermal impairments there is an expanding body of theoretical and applied scientific knowledge that can help water resource managers support coldwater resources and maintain fish thermal guilds. Current research efforts include modeling stream temperature, developing total maximum daily loads, evaluating cost-effective solutions, and assessing future climate scenarios. Challenges to addressing thermal impairments include jurisdictional differences in water quality standards, communicating analysis results and restoration needs, and addressing the pervasive effects of climate change. This symposium will provide a forum for water resource managers and practitioners to share technical information on how to restore and safe-guard coldwater resources, discuss challenges associated with working with multiple entities to improve temperature conditions, and consider techniques for communicating implementation needs to constituents.

### Policy News

We're tired of politics – giving it a rest ☺. However, we note with interest the charges of criminal neglect filed for the governor and charges of involuntary manslaughter filed for other officials associated with the lead exposures of residents in Flint, Michigan <https://www.bbc.com/news/world-us-canada-55656898>. Perhaps a Symposium on environmental racism would be timely? AFS initiatives can be found on the AFS policy website.

### Recent Member Publications, Awards

Please don't be shy about letting us know when you have a new research product (report, publication, website) or win an award. Here are a few that we are aware of:

1. Tsang Y., Infante DM, Wang L, Krueger D, Wieferich D. 2021. Conserving stream fishes with changing climate: Assessing fish responses to changes in habitat over a large region. *Science of the Total Environment* 755(2): 142503.

[www.sciencedirect.com/science/article/abs/pii/S0048969720360320?via%3Dihub](http://www.sciencedirect.com/science/article/abs/pii/S0048969720360320?via%3Dihub)

2. Hitt, N.P., K. Rogers, K. Kessler, and H. Macmillan. 2020. Modeling occupancy of imperiled stream fishes in the upper Kentucky and Cumberland River basins. USGS Open-File Report 2020-1100.

<https://doi.org/10.3133/ofr20201100>

3. Merovich, G., N.P. Hitt, E. Merriam and J. Jones. 2021. Response of aquatic life to coal mining in Appalachia. Chapter 10 *In: Appalachia's Coal-Mined Landscapes*. C.E. Zipper and J.G. Skousen, eds.

[https://link.springer.com/chapter/10.1007%2F978-3-030-57780-3\\_10](https://link.springer.com/chapter/10.1007%2F978-3-030-57780-3_10)

4. Langholtz, M, BH Davidson, HI Jager, L Eaton, LM Baskaran, M Davis, CC Brandt. 2021. Increased nitrogen use efficiency in crop production can provide economic and environmental benefits. *Science of the Total Environment*.

5. McManamay, R.A. & Jager, H.I. (2020) Stream Biomes of the World. *Encyclopedia of the World's Biomes* (eds M.I. Goldstein & D.A. DellaSala), pp. 134-151. Elsevier, Oxford.

Our Section website is here:

<https://waterquality.fisheries.org/>. Please friend the WQ section at [www.facebook.com/AFS-Water-Quality-Section-369954383031160/](https://www.facebook.com/AFS-Water-Quality-Section-369954383031160/) and feel free to post water quality news.

We also invite you to send news items to include in future quarterly news 'streams.' Ideas are always welcome.

Please stay well and wishing you the best getting through the winter safely.

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