



American Fisheries Society

September 2020 Governing Board Meeting

Friday, September 11, 2020

Meeting Participants

Society Officers

President	Scott Bonar
President-Elect	Brian Murphy
First Vice President	Leanne Roulson
Second Vice President	April Croxton
Past President	Jesse Trusenski

Divisions

Northeastern Division	Jud Kratzer, President
Northeastern Division	Ed Hale, President Elect
North Central Division	Jeff Kopaska, , President
North Central Division	Mark Fincel, Incoming President Elect (Proxy for Joe Conroy)
Southern Division	Tom Kwak, President
Western Division	Dan Dauwalter, President
Western Division	Todd Pearsons, President Elect

Sections

Bioengineering	Dana Postlewait, President
Canadian Aquatic Resources	Caleb Hasler, President
Early Life History	<i>absent</i>
Education Section	Mark Fincel (Proxy) and Trent Sutton, President
Student and Early Career Professional Subsection of Education Section	Heather Stewart, President (non-voting)
Equal Opportunity Section	<i>absent</i>
Estuaries	Catherine Johnston, President
Fish Culture	Mick Walsh, President
Fish Habitat	Kim Dibble, President
Fish Health	<i>absent</i>
Fisheries Administration Section	Jim Fredericks, President
Invasive an Introduced Species	Marybeth Brey, President
Fish History Section	<i>absent</i>
Fisheries Information and Technology	Paul Venturelli, President and Tiffany Hopper, President Elect (proxy)
Genetics	Andrew Whitely, President
Imperiled Aquatic Species Section	<i>absent</i>
International Fisheries	Patrick Cooney, President
Invasive and Introduced Fish Section	Kevin Irons, President
Marine Fisheries	Rick Methot, President and Jessica Miller, President Elect (proxy)
Native Peoples Fisheries	<i>absent</i>
Physiology	<i>absent</i>

Science Communications	Julie Claussen, President
Socioeconomics Section	Joshua Etherton, President and Mackenzie Mazur, President Elect (proxy)
Water Quality	Yetta Jager, President
Constitutional Consultant	Randy Schultz
AFS Executive Director	Doug Austen

Emerging Leaders

Corbin Hilling, Emerging Leader
Janessa Esquibbale Hussian, Emerging Leader
Mike Lawrence, Emerging Leader

Guests

Cecil Jennings, 2nd Vice President Elect
Patrick Shirey, Northeastern Division, Vice President
Brian Missildine, Board of Professional Conduct, Chair
Steve Lochmann, 150th Anniversary Committee, Chair
Don Jackson, AFS Past President, Retired Members Program
Marlis Douglas, Genetics Section, President Elect
Dan Brauch, Western Division, Vice President

AFS Staff

Beth Beard, AFS Communications Manager
Dan Cassidy, AFS Deputy Executive Director
Drue Winters, AFS Policy Director
Lauren Maza, AFS Student and Professional Development
Steve Kambouris, AFS Conference Coordinator

Minutes of the Meeting

1. **Welcome** by President Bonar at 1:05 p.m. EDT and introduction of participants
2. **Determination of Quorum** - Affirmed by Constitutional Consultant Randy Schultz
3. **Approval of Agenda** – approved with no changes
4. **Review and approval of minutes** from the joint meeting of the Governing Board and Management Committee meeting on July 20, 2020.
Moved by Kopaska, 2nd by Kratzer. Accepted with unanimous consent.
5. **Presidents Report** – Scott Bonar, AFS President (Attachment A1)
 - a. Climate Statement of the Worlds Aquatic Societies (Attachment A2) – Bonar reviewed the current status of the statement noting that 110 societies have now signed. The opening plenary session on September 14 will include three keynote speakers on climate and the statement will be officially released at that time.
 - b. Governing Board members were asked to consider their own specific climate stories (e.g. effect of climate change on walleye populations in the upper Midwest). These local stories will have a great probability of being relevant and picked up by the press.

6. Executive Directors Report

- a. State of the Society report (Doug Austen)
 - i. The “business model” of AFS is important to remember. During the Covid-19 pandemic, the business efforts of AFS have been impacted in many ways and we have responded by modifying our activities to address challenges
 - ii. All AFS units have cancelled their planned meetings in early 2021 and are exploring virtual options. The 2021 AFS annual meeting in Baltimore is also questionable and will at the very least be a hybrid model with both virtual and in-person attendees.
 - iii. AFS is likely to receive or be involved in four Multistate Conservation Grants for the 2021 cycle (Gray Literature, Climate Communications, Instream Flow, Angler Recruitment. Other activities include possible new partnerships with USGS, a digital books subscription program that has several initial purchasers, and new science communications training programs that will be available to members.
 - iv. AFS Membership (Attachment B1), despite substantial efforts to build member benefits, have simply not responded in a manner that we had anticipated or hoped. This lack of membership growth was suggested by Tom Kwak as simply a reflection of the current society trends and we should not anticipate that membership growth will be possible. Brian Murphy also, in references his reviews of AFS history, suggested that this is not a new phenomenon. Many times in the past, AFS has struggled with membership growth and has needed to find new ways to continue to be successful without a reliance on membership numbers.
- b. Budget review (Attachment B2) – presentation by Dan Cassidy
 - i. AFS has three main revenue sources (publications/journals, membership, and annual meetings) and these have generally been relatively stable and should not be relied upon as growth opportunities.
 - ii. AFS received an “unqualified” report from the auditors which reflects a solid audit with no adverse issues.
 - iii. Auditors did note that AFS should strive towards a benchmark of 6-months of unrestricted reserve funds available. However, AFS has recently been at around 50% of that target due to a concerted effort to invest in building program capacity. Unrestricted funds are those funds, similar to a checking account, that are available for use without any restrictions such as being designated for a specific use. Restricted funds are dedicated to a specific use (e.g. Skinner Fund, Berkeley Fund, chapter invested funds, etc.) and cannot be used for other purposes.
 - iv. 2021 Budget Presentation.
 1. Includes a small net profit projection based upon a series of assumptions: (a) no investment profits have been included, (b) successful in receiving 3 of the 4 MSCG, (c) small revenue from JASM2022 and WFC2024 meeting management fees, (d) Baltimore annual meeting at about 1,600 attendees with no change in registration rates from the Reno meeting, (e) no change in sponsorships, (f) reasonable implementation (no growth) of the Strategic Partners Program (SPP) as a replacement for the current organizational membership programs, (g) no membership revenue increase, (h) lowered revenue expectations from journal and books program but did include five new subscriptions to the e-books program, and (i) no changes in staffing plans with no re-filling of current vacant positions.

2. Funding from the Wiley contract comes in three main categories: subscription revenue, editorial support, and Fisheries magazine advertising. AFS receives a guaranteed minimum revenue and if we exceed that, AFS does get a percentage of that additional revenue.

7. **Strategic Positioning** (Attachment C)

- a. AFS established two new committees (1) and expansion of the current Investment Committee to work as the “Financial Planning and Procedures Committee and (2) a new “Strategic Evaluation and Positioning” committee
- b. The Financial Planning Committee will focus on updating our current financial procedures, provide training to the Management Committee on better understanding of our financial information, help with the decision process for existing and proposed AFS programs.
- c. The Strategic Positioning Committee will address the strategic planning gap that we have between five-year planning cycles. AFS does little to evaluate our work towards implementation of the strategic plan, evaluating new challenges, re-evaluate our planning time frame, and other duties to help AFS to better move in effective and proactive directions.
 - i. Composition – Officer’s may be spread so thinly with their existing duties such that other members should be considered in leadership role. AFS Fellows should be considered as potential members. Emerging Leaders could be an excellent source of committee members to assist in evaluating AFS programs and also eventually be placed on the next Strategic Plan (SP) development committee. Also, past Strategic Plan committee members, even from 10 years ago, would be of value. In fact, the 2020-2025 SP committee did include people from the previous SP effort. Further, AFS needs to ensure that state agency members are will represented on the committee. This could be done through working with the AFS Fisheries Administration Section.
 - ii. There should be continuity between the Strategic Planning committee that developed the 2020-2025 Plan and this new committee. Question as to whether this new committee should develop the next AFS Strategic Plan or a new committee would be impaneled to write the next Strategic Plan (this should be given more consideration given the probability of volunteer burn-out). Also, need to better utilize the existing Governing Board Reporting Tool as source of information.
 - iii. Strategic planning efforts should include input from people outside of AFS who can help us to better understand how they view AFS and how they would see AFS positioning itself to be increasingly relevant in the future. ASA was suggested as just one source of input (AFWA and others were also mentioned).
 - iv. Linking the SP work with that of the Officer’s as they develop their Presidential Plan of Work would be helpful in better integrating efforts and helping to ensure success.
 - v. Other sources of information should be our existing committee structure. For example, it has been many years since we did a comprehensive membership survey. We also need to better understand our AFS unit plans and their future efforts. For example, surveying AFS chapters would be a valuable projects. The AFS Socioeconomics Section is a critical source of expertise in developing future plans. AFS should also explore innovative tools to better understand membership needs. The “Q” method, for example, was suggestion by Leanne Roulson as a process used by a watershed group

that she has worked with.

8. Membership Committee Report (Attachment D)

Austen briefly reviewed the committee report by Kerry Flaherty Walia that was adopted by the Management Committee in their meeting on September 9, 2020. This will result in an increase in dues for Regular members of \$5 and a \$2 increase for Student/Early Career, Retired and Lifetime categories.

9. 150th Sesquicentennial Celebration and Columbus meeting planning

- a. Committee chair Steve Lochmann commended the members of his committee by noting that they have all worked far longer than originally anticipated due to the transformation of the Columbus meeting to Baltimore.
- b. The various 150th events have either been continued during the current year or moved to the Baltimore meeting. For example, the 150th website, articles in Fisheries and other activities have continued. Whereas the live exhibits and most of the 150th symposiums have been postponed to the Baltimore meeting. Some activities will simply continue but will be drawn out at a slower pace to maintain interest. An example is the 150th factoids that will be shared via AFS social media platforms.
- c. Baltimore planning, proposed budget and registration rates were approved at the September 9, 2020, Management Committee meeting. Rates will be the same as at the AFS-TWS Reno meeting.

10. Quick update on VAM numbers

- a. Future AFS annual meetings were reviewed by Austen and encouragement provided to the relevant Chapters, Divisions and Officers to engage in early conversations and planning
 - i. Spokane 2022 – Western Division, Washington-British Columbia Chapter, Leanne Roulson as AFS Officer.
 - ii. Grand Rapids 2023 – NorthCentral Division, Michigan Chapter and April Croxton.
 - iii. Honolulu 2024 – Western Division and AFS incoming 2nd Vice President Cecil Jennings will initiate an effort to re-develop a chapter in Hawaii and the Pacific Islands.
- b. Additional related meetings – These are meetings where AFS is either the managing lead or substantially involved in the planning process.
 - i. JASM2022 – the joint meeting of the members of the Consortium of Science Societies (CASS) to be held May 16-20, 2020, Grand Rapids, MI
 - ii. Latin American Fisheries Conference, May-June 2023 – in close cooperation with the AFS Puerto Rico Chapter, Western and Southern Divisions and a wide variety of fisheries leader throughout Mexico and Central and South America and the Caribbean.
 - iii. World Fisheries Congress 2024, Seattle, WA – In conjunction with the International Fisheries Section
 - iv. National Fisheries Summit – this is being led by a consortium of federal fisheries agencies and AFS has been invited as a partner and possible management entity. Event will be held at the National Conservation Training Center in Shepherdstown WV.

11. Constitutional Consultants Report - Motions for consideration:

- a. **Climate Change Committee recommendation for Standing Committee** status and vote by membership (Attachment E).
 - i. Motion to accept the recommendation in Attachment E.
This has been supported by the AFS Management Committee.
Moved by Murphy, 2nd by Venturelli. Approved with unanimous consent.
This will next be sent out to the membership for the required vote.
- b. **Retired Members Program** (Attachment F)
 - i. Proposal was presented by AFS Past President Don Jackson and recommends that AFS further explore the development of a set of actions to better engage and involve AFS retired members.
 - ii. This proposal was designed to address with the very real problem of some retired AFS members finding them with a loss of involvement and even depression. Yet, there is a wealth of expertise and experience as well as opportunities to continue with social involvement.
 - iii. Key is a voluntary information system that would match retired members with needs. It was suggested that AFS could use existing tools (software) for this and not expend resources on new development projects.
 - iv. Related projects could include activities such as a symposium at upcoming AFS meeting, develop a mentoring lunch but this could also be “reverse mentoring” where younger professionals could also assist retired members with expertise on new technology, etc.
 - v. **Moved by Trushenski that “the AFS Governing Board endorse this recommendation and that the AFS President establish a special committee to further flesh out this effort”. 2nd by Michelle Walsh. Approved with unanimous consent.**
(it was also noted that this effort should in no way diminish the opportunity for young members to be involved in similar activities)
- c. **Cooperative Research with Stakeholders Section (CRSS) –** (Attachment G1 and G2)
 - i. Proposal reviewed by Lee Benaka. It was acknowledged that there is potential overlap with a number of other AFS Sections such as Fisheries Administration, Fisheries Management, and others. They were all provided with the proposal and indicated that they recognize the possibility but don’t see it as being a problem.
 - ii. The name of CRSS was changed from simply Cooperative Research Section to differentiate it from the USGS Cooperative Fish and Wildlife Research Units. Other possible name options suggested including “Participatory” research and Lee Benaka suggested that this would be given consideration.
 - iii. It was noted that NOAA has a Cooperative Research Program and the CRSS would help to support and amplify that work.
 - iv. **Action was deferred to the next Management Committee meeting.**

12. **Report from the Standards Committee** (Attachment H)

- a. Summary of report provided by Trushenski including a description of proposed standards review processes that could be considered. The challenges of implementing this type of program were described and need additional consideration. There would be substantial volunteer time commitment and support required to make a full standardization effort

practical and reasonable. This would require funding support for honorarium and travel to working sessions of a standards committee in order to make this process successful. All standards would also need to have a disciplined review schedule to address new technology and other developments that would impact the established standards. Further, a peer review process was suggested and would require management.

- b. If AFS does determine to move forward with this, one option would be to expand the existing Resource Policy Committee as an administrative vehicle to manage the process.
- c. Question was raised on how to determine the appropriate level of specificity for establishment of standards. For example, would the Society adopt the entire standard sampling book or adopt specific technique standards. Similarly, the level of technique specificity in the Blue Book (disease diagnostic techniques) would need to be evaluated.
- d. **Murphy recommended that the report be sent to AFS Sections for review and further discussion.**

13. Update on Unit and Affiliate Working Group

Cassidy briefly reviewed the status of the Affiliate Working Group that was defined at the Little Rock Midyear Governing Board meeting. The charge of the group has expanded beyond simply dealing with affiliate member issues and now includes a more thoughtful development of the business relationship between chapters and the Society. This may include the development of some type of guidance document specifying roles and responsibilities, or other such tools to better assist in the more efficient and effective operations of the Society

14. Report on Executive Director annual review

President Bonar reported on the process used to conduct the review. This included soliciting comments from Governing Board members, interviewing staff who are direct reports to Executive Director Austen, and review of the documents provided by Austen as part of the review package. A final review will be presented to Austen by Bonar after the conclusion of the Virtual Annual Meeting.

15. Approval of Plan-of-work by President-elect Murphy ([Attachment I](#))

Motion to accept Presidential Plan of Work by Brian Murphy made by Patrick Cooney, 2nd by Julie Claussen. Accepted with unanimous consent.

16. Approval of Executive Director Plan-of-Work

- a. Deferred to fall meeting of the Management Committee

17. Additional old business

18. New Business

- a. Proposed Motion from the Governing Board.
The Governing Board of the American Fisheries Society hereby recognizes and commends the following AFS groups:
 - Columbus Annual Meeting Committee,
 - Virtual Annual Meeting Committee,

- Spring Virtual Meeting Committee,
- 150th Anniversary Committee, and
- American Fisheries Society staff;

for their:

- hard work,
- leadership in creating and supporting new pathways for success in the Society,
- dedication to extending their service beyond the originally designated time frames and duties, and
- incredible flexibility and adaptiveness during the Global Pandemic of 2020.

Your service and work created continuity and success for our Society as we navigated the cancellation and transition of resources from in person conferences to our inaugural use of virtual conferences.

Moved by Patrick Cooney; 2nd by Jeff Kopaska. Passed with unanimous consent.

19. **Adjourned** at 5:09 p.m.

Attachment A1 – Climate Statement

Statement of World Aquatic Scientific Societies on the Need to Take Urgent Action against Human-Caused Climate Change, Based on Scientific Evidence

*American Fisheries Society (AFS) • American Institute of Fishery Research Biologists
American Society of Ichthyologists and Herpetologists • American Water Resources Association
Asian Fisheries Society • Asociación de Oceanólogos de México, A.C.
Asociación Internacional de Hidrogeólogos - Mexico Chapter
Asociatia Romana de Limnogeografi (Romanian Limnogeographical Association)
Association Française de Limnologie / French Limnological Association [EFFS member*]
Associazione Italiana di Oceanologia e Limnologia [EFFS member*] • Australian Coral Reef Society
The Australian Freshwater Sciences Society • Australian Marine Sciences Association
Australian Meteorological and Oceanographic Society • Australian Society for Fish Biology • BirdLife Australia
Blue Ventures • The Brazilian Society of Ichthyology • British Phycological Society
Canadian Aquatic Resources Section (CARS) of AFS • Canadian Centre for Evidence-based Conservation
Canadian Conference for Fisheries Research • Canadian Society of Zoologists
Coastal & Estuarine Research Federation • Coastal Research and Education Society of Long Island (CRESLI)
The Coastal Society • Community of Arran Seabed Trust • Conchological Society of Great Britain and Ireland
Croatian Association of Freshwater Ecologists (CAFÉ, HUSEK) [EFFS member]
Czech Limnological Society [EFFS member*] • Deep Ocean Stewardship Initiative (Climate and Fisheries WG)
Desert Fishes Council • EFYR European Fresh and Young Scientists [EFFS member]
European Federation for Freshwater Sciences (EFFS) • Finnish Limnological Society [EFFS member]
Fisheries Society of the British Isles • The Freshwater Biological Association [EFFS member*]
Freshwater Fisheries Society of BC • Freshwater Mollusk Conservation Society • German Ichthyological Society
German Limnological Society (DGL) [EFFS member*] • Gilbert Ichthyological Society
Hungarian Hydrological Society [EFFS member] • Hydroecological Society of Ukraine
The Hydrographic Society of America • The Hydrozoan Society • Iberian Association of Limnology [EFFS member]
Ichthyological Society of Japan • Ichthyological Society of Ukraine • The Institute of Fisheries Management
International Association for Danube Research • International Association for Great Lakes Research (IAGLR)
International Association of Aquatic and Marine Science Libraries and Information Centers (IAMSLIC)
International Coral Reef Society • International Federation of Hydrographic Societies • International Peatland Society
International Phycological Society • International Seaweed Association • International Society of Limnology
International Water History Association • Irish Freshwater Sciences Association [EFFS member]
The Japanese Society of Fisheries Science • Lake Victoria Fisheries Organization
The Limnological Society of Turkey [EFFS member] • Living Oceans Society • Macrolatinos@ Network
Malacological Society of London • Marine and Oceanographic Technology Network
The Marine Biological Association of India • Marine Biological Association of the United Kingdom
Marine Stewardship Council • National Association of Marine Laboratories (NAML)
Netherlands Malacological Society (Nederlandse Malacologische Vereniging)
The New Zealand Freshwater Sciences Society (NZFSS) • North American Lake Management Society
Oceania Chondrichthyan Society • Ocean Conservation Society • Philippine Association of Marine Science
Phycological Society of America • Polish Hydrobiological Society [EFFS member*] • Polish Limnological Society
Romanian Ecological Society [EFFS member] • Scientific Committee on Antarctic Research
Serbian Water Pollution Control Society SWPCS [EFFS member] • SIL Austria [EFFS member*]
Slovak Ichthyological Society • Slovak Limnological Society (SLS) [EFFS member*] • Sociedad Chilena de Limnología*

*Sociedad Científica Mexicana de Ecología, A.C. • Sociedad Iberica de Ictiología • Sociedad Ictiológica Mexicana
Sociedad Mexicana de Planctología A.C.*

*Sociedad Mexicana para el Estudio de los Florecimientos Algales Nocivos (SOMEFAN; Mexican Society for the Study
of Harmful Algal Blooms • Sociedade Brasileira de Carcinologia • Société Française d'Ichtyologie
Society for Conservation Biology Marine Policy Section • Society for Freshwater Science
The Society for Marine Mammalogy • Society for the Study of Amphibians and Reptiles
Society of Canadian Limnologists/Société canadienne de Limnologie (SC) • Society of Wetland Scientists
Southern African Soc. Aquatic Scientists • Spanish Malacological Society (Sociedad Española de Malacología)
Swiss Hydrological and Limnological Society [EFFS member*] • Vietnam Fisheries Society (VINAFIS)
Western Indian Ocean Marine Science Association • Wild Oceans • World Aquaculture Society
The World Council of Fisheries Societies • World Sturgeon Conservation Society • Zoological Society of Pakistan*

Water is the most important natural resource on Earth as it is vital for life. Aquatic ecosystems, freshwater or marine, provide multiple benefits to human society, such as provisioning of oxygen, food, drinking water, and genetic resources; regulation of atmospheric composition and climate; water purification; storm buffering; mitigation of floods/droughts; recreation areas; and other purposes. Our existence and well-being depend on the health and well-functioning of aquatic ecosystems. People naturally distribute around water—approximately 40% of the world's population lives within 100 km (62 mi) of a coast.¹

The world's aquatic resources are now under their greatest threat in human history. Human-caused climate change is accelerating the degradation of aquatic ecosystems and the services they provide. Aquatic ecosystems are among the most affected worldwide (e.g., in case of freshwater ecosystems, one measure of biodiversity, the freshwater living planet index for species populations, declined 83% from 1970 to 2014, while up to 90% of coral reefs will disappear by mid-century if the current trends continue).²

We, the world's aquatic scientists, spend our lives studying these systems. We see exceptional and disturbing changes in the world's aquatic ecosystems due to climate change and believe that we must continue to share peer-reviewed scientific findings with the public and policymakers to emphasize the seriousness of this threat and the need for immediate action. For the first time, the assessment of global risks conducted by the World Economic Forum ranked the impact of “climate action failure,” “biodiversity loss,” and “water crisis” among the top five risks over the next decade.³ In recent years, migration has increased and geopolitical tensions have been exacerbated: between 2008 and 2016, more than 20 million people per year have been forced to move due to extreme weather events, while according to the United Nations, in 2017, water was a major conflict factor in 45 countries.³ These negative effects are expected to increase under current climatic trends. For example, in the United States, the climate-related economic damage is estimated to reach 10% of the gross domestic product by the end of the century.³ In Europe, the minimum cost of not adapting to climate change is estimated at €100 billion per year in 2020 and €250 billion in 2050.⁴

Experts in environmental, social, and economic fields collectively point towards a severe environmental and humanitarian crisis, with repercussions at a global level, unless worldwide concerted climate actions are implemented urgently.

This document summarizes key scientific findings highlighting the effect of climate changes on aquatic ecosystems. These findings provide evidence of what effects are currently happening and why world policymakers and all of humankind need to act jointly and launch concerted actions now if they wish to mitigate these impacts.

The Challenge

- Thousands of peer-reviewed studies by scientists from authoritative institutions worldwide have documented evidence for climate effects on aquatic systems that are already occurring and are extensive.⁵
- Many globally respected sources, including the American Geophysical Union,⁶ National Academies of Science from dozens of countries,⁷ the Intergovernmental Panel on Climate Change,⁸ and the Fourth U.S. National Climate Assessment⁹ support findings that increased atmospheric concentrations of greenhouse gases from fossil fuels (i.e., emissions) and land use changes such as deforestation are driving current climate change.
- Many of these changes are and will be irreversible. They will continue to worsen if we persist on our current trajectory.¹⁰
- Impacts already occurring range from increased frequency, intensification, and severity of droughts, heat waves, floods, wildfires, and storms; melting glaciers; destabilization of major ice sheets; shifting ocean currents, rising sea level; ocean acidification and deoxygenation; shifts in species ranges, including expansion of alien-invasive species; aquatic plant and wildlife disease outbreaks; mass coral bleaching events; and more, with a mounting toll on vulnerable ecosystems, human societies, and local and global economies.¹¹
- These events are precursors of even more damages to fisheries, biodiversity, and human society at large.¹²
- Delaying action to stop underlying causes of climate change will increase the economic, environmental, and societal consequences.¹³
- If humanity wishes to avoid calamitous consequences for our aquatic ecosystems and humans that depend on them, the time to curb greenhouse gas emissions, sequester greenhouse gasses, and adapt to an already changing climate is now.¹⁴ Intelligent, rapid movement toward such goals will provide great benefits to aquatic ecosystems and the humans that depend on them.
- Rapid global response and large-scale actions are possible if public and government commitment exists.¹⁵

The Evidence: Effects on Marine Resources

- Shifts in species composition, behavior, abundance, and biomass production are now occurring.¹⁶
- Lobster,¹⁷ cod,¹⁸ mackerel,¹⁹ coral reef fishes,²⁰ and other species important to fisheries²¹ are either moving poleward to deeper waters or declining.²²
- Coastal ecosystems are being transformed, degraded, or lost, either largely²³ or in part due to climate change, including sea grass meadows,²⁴ mangroves,²⁵ coral reefs,²⁶ and kelp forests.²⁷
- Effects of altered species compositions are affecting entire ecosystems.²⁸
- Carbon emissions cause global ocean acidification, which is affecting the survival of organisms, especially shellfish, and accelerating coral reef erosion.²⁹
- Rising frequency and intensity of marine heatwaves has been documented and is projected to continue.³⁰

- Reductions in global ocean dissolved oxygen concentrations have occurred over the past five decades.³¹
- Climate change is interacting with other stressors such as excess nutrient input,³² overharvesting,³³ and novel species interactions³⁴ to further suppress marine ecosystems.
- Climate change is linked to emerging and re-emerging disease outbreaks in marine wildlife and plant species.³⁵
- Global production of marine animals continues to decrease and shifts in species composition will increase unless greenhouse gas emissions are reduced.³⁶
- Seabirds are recognized as indicators of long-term environmental change: nearly three out of four of the world's seabirds have disappeared since 1950, and more than half the remaining species face substantial threats.³⁷ In North America alone, two-thirds (389/604) of bird species, which includes waterbirds, are moderately or highly vulnerable to climate change under a 3°C scenario.³⁸

The Evidence: Effects on Freshwater Resources

- Freshwater ecosystems are among the most threatened on Earth.³⁹
- Freshwater ecosystems cover less than 1% of the planet's surface but support one-third of vertebrate species and 10% of all species.⁴⁰
- The capacity of all freshwater ecosystems to adapt is relatively low given the nature of freshwater systems and the scale of impacts of climate change.⁴¹
- Climate change is altering abundance, predator–prey dynamics, expansion of invasive species, growth, recruitment of species, and novel species interactions, leading to declines in the number and diversity of freshwater aquatic organisms.⁴²
- Increased frequency, intensity, and length of drought are affecting the amount and quality of freshwater available for both aquatic ecosystems and humans.⁴³
- Climate change impacts on flow regimes, including both increased droughts and low-flow periods, and increased flooding impact native species with narrow ranges of flow requirements and allow expansion of alien-invasive species that affect recreational and commercial harvest of fishes and clog waterways.⁴⁴
- Geographic ranges of many plants and animals have moved poleward and to higher altitudes while alien-invasive species expand with the increasingly warm conditions.⁴⁵ Unlike marine systems, pathways to other habitats are often blocked, leading to localized extinctions.⁴⁶
- Temporal shifts in seasonal cues, such as spring runoff or monsoon seasons, affect spawning success of fish, resulting in poor survival.⁴⁷
- Higher incidence of wildfires is affecting aquatic systems by making watersheds more susceptible to flooding and by reducing water quality, especially with post-fire ash and sediment deposition.⁴⁸
- Wetlands capacity for carbon storage and mitigation of climate change are being damaged by changes linked to climate shifts and other components of global change, such as increased land development and fires.⁴⁹
- Higher temperatures and precipitation runoff have increased harmful algae blooms, which can hurt fish, mammals, birds, and even humans.⁵⁰

- Climate change may act synergistically with nutrients to magnify eutrophication and further degrade water quality and ecosystem services, including affecting drinking water.⁵¹
- Organisms dependent on snow melt and glacial streams are declining or shifting their distribution.⁵²
- Release of heavy metals such as mercury, currently stored in glaciers and the permafrost, is projected to further affect freshwater organisms.⁵³
- Climate change is linked to emerging and re-emerging disease outbreaks in freshwater wildlife and plant species.⁵⁴
- These seemingly diverse and small-scale changes combine to create multiple, cumulatively stressful challenges to aquatic species.⁵⁵

The Evidence: Effects on World Society Dependent on Aquatic Resources.

- Clean and sufficient water is needed by all life forms.
- Fisheries provide quality protein sources not easily replaced by terrestrial sources. According to the Food and Agriculture Organization of the United Nations, fish accounts for 17% of animal protein consumed globally, fishing and aquaculture directly employ almost 60 million people, and global trade in fish products has reached US\$152 billion per year, with 54% originating in developing countries.⁵⁶
- In the short term, new fisheries are appearing in some newly formed ice-free areas⁵⁷; however, overall fisheries catch is projected to decline related to increasing declines in water quality and primary production as a result of climate change, with corresponding effects on food security.⁵⁸ Ocean warming and changes in primary productivity are related to changes in many fish stocks. Fish population reestablishment has declined 3% per decade, and maximum catch potential declined 4.1% over the 20th century.⁵⁹ Water temperature increases due to climate change are projected to exceed the tolerance limits of 10–60% of freshwater and marine species by 2100, depending on the amount of greenhouse gas emissions allowed.⁶⁰
- Climate change impacts on aquatic ecosystems are affecting incomes, food security, key cultural dimensions, and livelihoods of resource-dependent communities.⁶¹
- Species shifts are affecting traditional fisheries from the tropics to the polar regions through reduced access to fish stocks, fishing areas, and loss of local knowledge.⁶²
- Climate change compounds the impact of other practices such as pollution, overfishing, and unsustainable coastal development. These combined impacts are projected to drive many small-scale fisheries and economies out of existence.⁶³
- Warming of waters affects seafood safety through elevated bioaccumulation of heavy metals and pollutants and an increased prevalence of waterborne pathogens affecting both human and animal health.⁶⁴
- Tourism and tourist sites are being affected in many areas that are dependent on local ecosystems. Sustainable diving, snorkeling, angling, marine mammal and bird watching, and other recreational activities and businesses depend on maintenance of healthy aquatic resources.⁶⁵

- Climate change degrades coastal ecosystems such as mangroves, sea grasses, marshes, peatlands, and coral reefs that provide services to humans such as protecting coasts from erosion, storms, and flooding, providing key wildlife habitat and sequestering carbon.⁶⁶
- Climate change damages riparian ecosystems that provide services to humans, such as protecting streams from flooding, intercepting pollutants, reducing erosion, providing shade and wildlife habitat, sequestering carbon, and storing water during high-flow events.⁶⁷
- Climate change contributes to harming wetlands, which provide many of the same services to humans, as stated above. Wetlands play a critical role in carbon storage and sequestration. In particular, peatlands, despite occupying on 3% of the land surface, store twice as much carbon as the world's forests.⁶⁸
- The level of impacts will be governed by the level of protective limits our nations place on future emissions combined with riparian and coastal zoning, and changes in fisheries management practices.⁶⁹

The Needed Responses

- We assert that rapid action is necessary to drastically curb release of greenhouse gas emissions and to remove and store CO₂ from the atmosphere to prevent the most calamitous consequences of human-caused climate change to marine and freshwater ecosystems on which all humankind depends.
- Global and national targets are necessary to protect and restore carbon dense ecosystems, such as peat, sea grasses, and other wetlands to sequester carbon, prevent greenhouse gas emissions, and reduce the impacts of climate change.
- Governments, the public, industry, academia, and all other sectors of society must prioritize actions and act in a concerted way to halt human-caused climate change if they are to prevent dire consequences.
- A rapid transition towards energy sources and other products and services that do not release greenhouse gases, and research and policies that favor an efficient transition to a low carbon world is required to slow the degradation of aquatic systems, as above. Such a transition could be accomplished by all governments by immediately acting on the advice of specialists in green energy technology, carbon sequestration, marketing, education, socioeconomic principles, and related disciplines.
- Robust adaptation measures; identification and easing of other environmental stressors that act synergistically with climate change; and additional resources for data collection, mapping, and research to better understand potential impacts and to arm natural resources agencies with the tools to mitigate these impacts are essential to better understand and plan for changes in aquatic ecosystems.
- Done intelligently, movement to curtail human-caused climate change can result in advanced, novel technologies; strong economies; healthier aquatic ecosystems; greater food security; and human well-being.

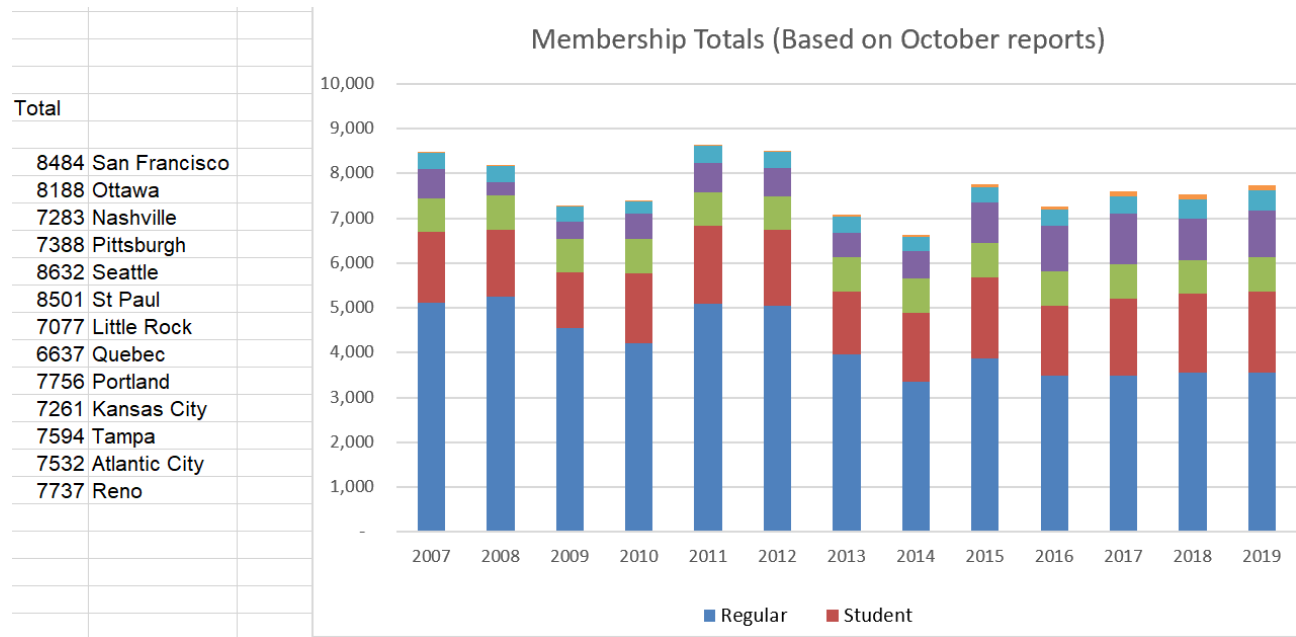
It is time to acknowledge the urgent need to act to address climate change. Delaying action to control greenhouse gas emissions is not an option if humankind wishes to conserve the aquatic resources and environmental safety of the world.

Note that the version in Attachment A does not include the full list of references. The complete statement can be found at: <https://climate.fisheries.org/world-climate-statement/>

Attachment A2 – President’s Report

Scott’s Powerpoint presentation to be inserted here.

Attachment B1 – AFS Membership 2007-2019



Attachment B2 – Financial Status Report (Cassidy presentation)

AFS Financial Status

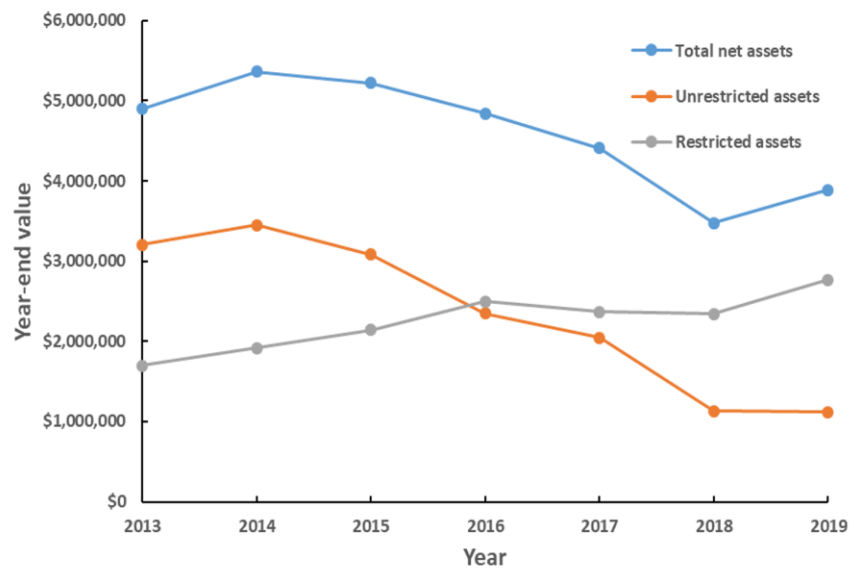
Management Committee

September 9, 2020

AGENDA

- Audit and Investment Committees
- 2020 Financial Status
- 2021 Budget

Audit Committee Report



Audit Committee Report

- ***Recommendations and Suggestions 2019***
- The Audit Committee agrees with the findings of the auditors*
- Recommends that AFS national leadership
 - consider ways to bring annual expenses in line with expected revenue, as well as
 - building unrestricted reserves for unexpected challenges.

* unqualified opinion; guidance on strengthening unrestricted net assets to 6 months of operating budget.

Audit Committee Report

- **The Audit Committee recommends:**
- Establishing more timely ways for the Management Committee to track AFS fiscal health;
- Greatest attention should be placed on
 - Establishing more timely ways for the Management Committee to track AFS fiscal health;
 - Greatest attention should be placed on unrestricted assets;
 - AFS leadership needs to establish priorities so that fiscal challenges can be addressed quickly and effectively.

Audit Committee Report

- **The Audit Committee recommends:**
- Doug Austen and Dan Cassidy have developed ideas with input from the Investment and Audit Committees. President-Elect Brian Murphy has agreed to make further development and implementation priorities for the coming year.
- It is imperative that other members of the Management Committee and Governing Board also engage.

Investment Committee Report

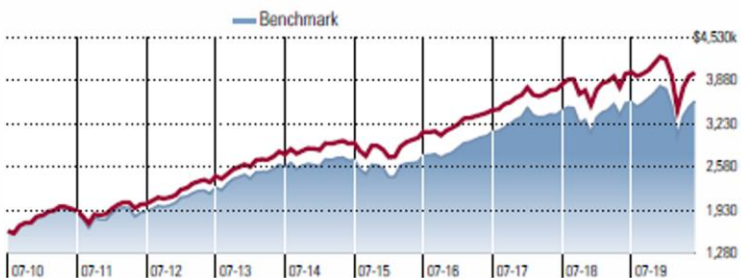
- Replaced several 3* bond and stock funds with stronger performers recently.
- Advisor seeks guidance on future AFS resource needs in order to better manage the account.
- Supports formation of new strategic and financial special committees.

Investment Performance

Performance 06-30-2020

Investment Activity Graph

Portfolio Initial Mkt Val: \$1,613,438 Final Mkt Val: \$3,991,746



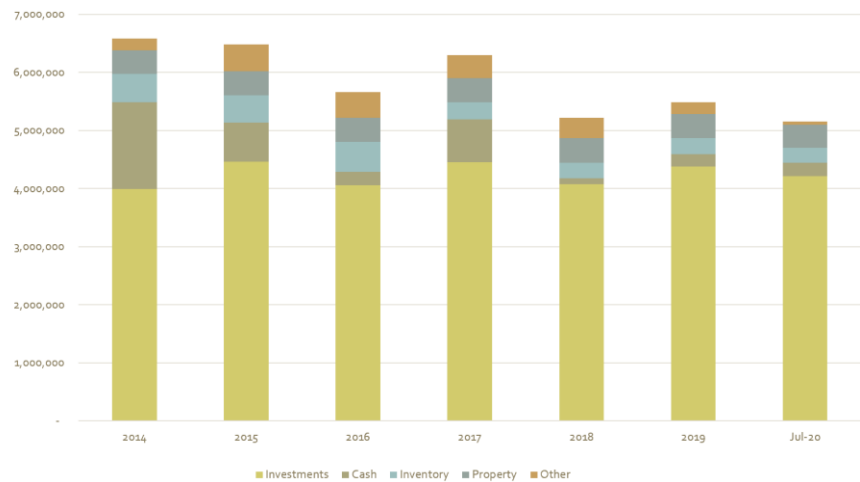
Trailing Returns*

	3 Mo	1 Yr	3 Yr	5 Yr	10 Yr
Portfolio Return	16.43	0.42	5.58	6.40	9.99
Benchmark Return	17.22	0.81	5.39	5.89	8.89
+/- Benchmark Return	-0.79	-0.39	0.19	0.51	1.10

*Full return history is not available for all securities. Please see Return Participation disclosure.

Financial Status July 2020

ASSETS 2014 - July 2020



Financial Status- July 2020 Revenue

For the seven months				
	Year to Date - Actual			
	2020	2019	Var \$	2019
Revenue				
Administration	(\$153,865)	\$517,458	(\$671,323)	
Web	4,560		4,560	
Continuing Education	1,575	24,655	(23,080)	
Certification	2,750	3,250	(500)	
Other Education				
Hutton	37,750	5,000	32,750	
Multi State Grants	38,800	19,401	19,399	
Web Tool	9,250		9,250	
Cornell				
Other Grants & Contracts				
Annual Meeting	55,920	690,850	(634,930)	
Membership	514,166	539,266	(25,100)	
Awards	3,184	3,624	(439)	
Mem Other	11,194	17,671	(6,477)	
Jobs	15,650	26,550	(10,900)	
Advocacy				
Books	71,067	56,222	14,845	
Journals	830,798	810,913	19,885	
Fisheries		50	(50)	
Total Revenue	1,442,799	2,714,910	(1,272,111)	

Financial Status July 2020 Expense

	Year to Date - Actual			2
	2020	2019	Var \$	
Expenses				
Administration	190,226	215,665	25,439	
Staff Costs	1,169,465	1,255,397	85,932	
Technology	25,902	25,039	(863)	
Communication	1,482	2,605	1,123	
Web	22,052	21,344	(708)	
Development		2,950	2,950	
Continuing Education	52	2	(50)	
Certification	70	63	(7)	
Other Education		109	109	
Board	23,608	22,803	(804)	
Hutton	33,076	87,975	54,899	
Multi State Grants	51,650	31,976	(19,674)	
Cornell	(1,307)	(453)	854	
Other Grants & Contracts		12,603	12,603	
Annual Meeting	27,381	60,016	32,635	
Other Meetings		1,699	1,699	
WCF World Council of Fisheries	1,464		(1,464)	
Membership	57,216	111,871	54,656	
Awards	14,128	15,346	1,218	
Mem Other	589	770	180	
Jobs	4,334		(4,334)	
Units	69		(69)	
Advocacy	3,058	5,720	2,661	
Books	9,047	8,144	(903)	
Journals	38,888	64,162	25,274	
Fisheries	7,818	2,822	(4,996)	
Total Expenses	1,680,268	1,948,628	268,359	
Net Change from Operations	(237,469)	766,282	(1,003,753)	

Attachment B2 – Budget Report



American Fisheries Society

Organized in 1870 to Promote the Conservation, Development and Wise Utilization of Fisheries
425 Barlow Place, Suite 110 * Bethesda, Maryland 20814-2199
301-897-8616 | FAX 301-897-8096 | www.fisheries.org

Scott Bonar, Ph.D.
President 2019-2020

Douglas J. Austen, Ph.D.
Executive Director

2021 Budget Report - September 4, 2020

The combination of an uncertain economy and unsettled virus situation makes preparing the 2021 Budget challenging and raises the possibility of whether these risks will carry over into next year. While certain parts of the U.S. economy continue to improve (jobs, real estate and technology) others parts continue to struggle (travel, retail, airlines). State budget revenues likely will be tighter and higher education is being squeezed as well. It certainly seems as if there are multiple economic currents affecting different parts of the economy, in an election year no doubt. The unknown questions are how will these trends impact AFS in the key areas of membership, publications and meeting attendance and whether people will feel comfortable traveling to attend meetings and generally getting back to a 'new normal'. As such, staff consider this budget a 'work-in-progress' and it should be revisited frequently to review assumptions during the upcoming year.

INCOME Assumptions:

1. Investments- only expected interest and dividends income was included and no provisions were made for unrealized and realized gains (departure from past practice).
2. Continuing education- budgeted at a typical east coast meeting level
3. Webinars- instituted nonmember registration fees in 2020 plus modest sponsorships
4. Hutton- budgeting for 25 students
5. Multi-state grants- included personnel cost reimbursements only for three of four grant applications (climate communications, gray literature and angler retention)
6. Other grants/contracts- represents accruals for the JASM management fee and the NOAA Coop agreement for personnel costs reimbursements
7. Annual meeting- target registration is 1,600 (similar to AC) with modest exhibitor and sponsors income
8. Membership- projected to get back to 2018 levels. Does not include dues increase nor institutional member growth from Strategic Partner's Program (SPP) launch.
9. Jobs- launch of enhanced jobs board this fall plus limiting comp job postings expected to lead to growth.
10. Books- includes slight reduction in title sales plus addition of five new eBook institutional subscribers
11. Journals- lowered subscriptions as Wiley is not anticipating changing renewal rates for the coming year.

EXPENSE Assumptions:

1. Administration- reduced general staff travel, otherwise essentially no change in office administration
2. Staff costs- not refilling office manager and membership coordinator; includes payment of exec-staff 2020 salary deferrals, no salary adjustments for all staff on hold, less than 5% benefits increase
3. Board- limited intl and domestic travel, officer retreat, and allocation for retired member travel award
4. Hutton- based on awards for 25 student
5. Annual meeting- capped F&B at \$200 per person, other costs on par
6. Membership- database support, licenses, and unit dues rebates
7. Books- removed travel, last year included production expense that weren't capitalized
8. Journals- includes editors stipends increase, lower travel and editorial costs
9. Fisheries- stipends only

What is NOT INCLUDED in the budget:

1. Individual membership dues increase
2. Any growth from the new SPP
3. USGS Coop agreement
4. MSCG number four- instream flow proposal
5. Increase in annual meeting registration fees

**AMERICAN FISHERIES SOCIETY
2021 Budget Report**

as of 9/3/2020

	2021	June to Date - Actuals		Budget	2019 Annual	2020 Budget	2021 Budget Assumptions
	Budget	2020	2019	2020 BUDGET	Actual	Forecast*	
Revenue							
Investments	\$45,000	(\$290,746)	\$492,216	\$213,000	\$699,811	421,000	Interest only, no gains
Web (unit hosting)	5,000	4,560	-	8,000	5,920	5,000	income represents unit hosting fees
Continuing Education	12,000	1,375	10,550	15,000	32,865	-	
Certification	5,000	2,750	3,250	5,000	5,150	5,000	
Webinars	8,000	-	-	12,000	-	4,000	NonMbr reg fees and sponsorships
Hutton	125,000	37,750	5,000	100,000	(20,000)	55,000	based on 25 students
Multi State Grants	163,000	38,800	-	-	68,182	359,000	Staff costs only for 3 of 4 grants proposals
Web Tool	-	9,250	-	-	-	-	
Cornell (completed in 2019)	-	-	-	-	22,616	-	
Other Grants & Contracts	198,000	-	-	87,000	-	-	JASM meeting mgmt; NOAA Co-op
Annual Meeting	966,000	19,810	316,685	1,119,000	1,246,326	-	1600 attendees ; no chng in reg rates
Membership	532,000	505,054	521,694	555,000	551,943	527,000	No Partners growth; Excl'd dues increase
Awards	3,000	3,184	3,429	5,000	3,112	4,000	
Mem Other/1870 Contributions	15,000	10,594	17,627	46,000	31,392	30,000	Lowered individual contributions to \$10,000
Jobs	55,000	15,200	21,700	45,000	47,282	45,000	New job site should bring in addl income
Policy	-	-	-	-	14,641	-	
Books	160,000	70,247	38,327	124,000	155,939	154,000	reduced book sales; added 5 new eSubs @ \$10,000 ea
Journals	1,141,000	574,950	560,796	1,185,000	1,137,506	1,115,000	Lowered subscriptions 3.5% from 2020 budget
Fisheries	0	-	25	-	105	-	
Total Revenue	3,433,000	1,002,778	1,991,299	3,519,000	4,002,790	2,724,000	
Expenses							
Administration	319,000	155,337	179,303	330,000	350,230	315,100	Office expenses, audit, bus. insurance, maintenance
Staff Costs	1,793,000	1,025,397	1,089,968	1,882,000	2,108,897	1,902,000	Two fewer pos than 2020; payout salary deferrals; no COLA
Technology	45,000	22,705	21,419	45,000	45,276	45,000	
Communication	7,500	1,482	2,605	9,000	2,605	5,000	
Web	34,500	18,714	18,309	20,000	39,385	41,000	website support, hosting and mainteance
Development	3,500	-	2,950	10,000	3,221	6,000	
Continuing Education	9,000	52	2	10,000	18,263	-	
Certification	500	70	63	1,000	125	1,000	
Webinars	3,000	-	109	-	2,149	3,000	
Board	31,000	23,588	22,499	55,000	44,266	17,500	Limited domestic and international travel
Hutton	101,000	19,051	58,948	82,000	110,140	31,000	
Multi State Grants	-	42,400	12,575	-	63,952	258,000	
Cornell	-	(1,307)	(453)	-	9,576	-	
Other Grants & Contracts	-	-	12,603	7,000	12,235	-	

**AMERICAN FISHERIES SOCIETY
2021 Budget Report**

as of 9/3/2020

	2021	June to Date - Actuals		Budget	2019 Annual	2020 Budget	2021 Budget Assumptions
	Budget	2020	2019	2020 BUDGET	Actual	Forecast*	
Annual Meeting	743,000	39,268	55,852	665,000	633,922	25,000	Modest Exhibit sponsor income F&B limited \$200pp
Other Meetings	-	-	1,699	-	1,788	-	
WCF World Council of Fisheries	-	1,464	-	-	-	-	
Membership	94,000	52,656	94,174	128,000	107,683	123,000	
Awards	4,000	14,128	15,195	3,000	16,624	3,000	
Mem Other	1,000	589	723	1,000	873	1,000	
Jobs	12,000	4,334	-	-	13,948	12,000	
Units	-	69	-	-	-	-	
Policy	7,000	3,058	5,625	14,000	6,270	5,200	
Books	55,000	6,588	7,265	16,000	98,445	20,000	
Journals	143,000	36,560	33,397	174,000	117,874	174,000	Increase in editors stipends
Fisheries	10,000	7,818	1,568	27,000	9,134	27,000	
Total Expenses	3,416,000	1,474,021	1,636,398	3,479,000	3,816,881	3,014,800	
Net Change from Operations	17,000	(471,243)	354,901	40,000	185,909		
Non Operating (net)							
Restricted contribs/Disburse	-	29,115	12,952	-	224,481	-	
Total Non Operating	-	29,115	12,952	-	224,481	-	
TOTAL NET CHANGE	17,000	(442,128)	367,853	40,000	410,390	(290,800)	

* prepared in Spring 2020 and doesn't include Virtual Meeting or CE income.

Attachment C – Finance and Strategic Positioning Committees

American Fisheries Society

Proposal for Structure and Responsibilities for Finance and Strategy Work Groups

Effective 9/2020 through 8/2021

August 2020

Purpose: To address the absence of specific groups dedicated to financial planning and strategy interpretation and also to enhance effectiveness of Society governance, the modification of the Investment Committee and the formation of the Strategic Evaluation Special Committee are proposed. These two committees would be actively pursued and evaluated for the first year and considered for reappointment or full committee status in subsequent years. Chairs of the Investment and Audit committees are supportive of this approach.

Financial Planning and Procedures Committee

Note – this would be an expansion of the roles of the Investment Committee as an interim step to assess the effectiveness of this approach. If successful, the Investment Committee charge in the Rules and Procedures Manual would be revised to reflect these and other, to be determined, new roles. The Audit Committee would remain as an independent Committee for now with the possibility of it becoming part of the Financial Planning Committee after further evaluation.

Purpose:

To act as a singular body to work with AFS staff in assessing and evaluating the financial position and future of the Society and provide advice and guidance to the Management Committee, Governing Board and AFS leadership on such matters. This committee will work with the Audit Committee and AFS Investment Advisors to develop and promulgate appropriate financial plans for the Society.

Duties:

1. To engage with AFS staff, investment advisors and others to provide review, recommendations, and evaluate progress of AFS finances
2. Review AFS Procedures and update as appropriate
3. Develop training for MC to ensure that they can fully handle their fiduciary role
4. Develop better tools for reporting on AFS finances to the MC/GB
5. Act somewhat as role of “AFS Treasurer” – Primary partner to AFS staff on receiving and assessing financial reports, etc.
6. Help facilitate program assessments
7. Help review new program proposals

Composition:

Potential leadership: under the direction of the 1st and 2nd vice president

Members: Investment Committee members, MC representatives, past presidents, members at large or unit past treasurers

Staff liaison: Dan Cassidy

Strategic Evaluation and Positioning Committee

Note: AFS does not have a standing committee on strategic planning but, rather, the President appoints a Special Committee on Strategic Planning on a roughly five-year cycle to assess and develop a new strategic plan for the society. This proposal would establish the predecessor of a possible standing committee that would annually (or regularly) track the status of work towards the Strategic plan as well as to develop the plan when appropriate.

Purpose:

To provide leadership, guidance and to regularly evaluate the progress of AFS in achieving its strategic objectives. On a five-year cycle, or a time period determined to be appropriate, lead the development of a new strategic plan for the society.

Duties:

1. Regularly review the AFS Strategic Plan to assess progress (or lack), provide guidance on revising priorities, etc.
2. Act to assess future strategic opportunities (scanning the landscape) for AFS and provide guidance on how to proceed.
3. Help to define a process, tools, procedures for ensuring that AFS understands our current environment as well as assesses future trends. This could include working with committees, units and other governance groups developing surveys, focus groups, etc. that will enable AFS to accurately understand the strategic position of the society.
4. Help monitor performance against goals and reporting through the GBRT
5. Coordinate efforts with the Strategic Plan Committee

Composition:

Potential leadership: under the direction of the President-elect and past-president

Members: Division GB representatives, past presidents, members at large or unit past presidents

Staff liaisons: Doug Austen, Dan Cassidy

Attachment D – AFS Membership Committee Motion

Motion: Individual Member Dues Increase for 2021

Date: September 8, 2020

Background:

(Provided by Kerry Flaherty-Walia, co-chair and Justin VanDehey, co-chair AFS Membership Committee)

The Membership Committee requests the Governing Board consider a proposal to raise individual member dues for the 2021 calendar year. Recall, membership dues were last increased in 2018 and since then, membership has steadily risen, likely reflecting greater member value (with the addition of journals, webinars, new books and other programs) and the enhanced marketing and communications efforts by staff. With the forthcoming new job board, gray literature database, webinars, new book titles and more, there is a strong case for a dues increase. For 2018, AFS conducted an extensive campaign to solicit input from across the Society and promote the new rates and benefits. We anticipate a subtler approach for communicating a dues change, if approved. With the annual renewal process typical beginning in October, a decision is needed in early fall in order to allow time to adjust rates and communicate the changes.

Proposals:

- For 2021, increase regular member dues by \$5 and student, retired, early career, and lifetime member dues by \$2.
- For future years, allow AFS staff to propose bi-annual or annual dues adjustments up to the inflation rate determined by the target Consumer Price Index (CPI) per year for each member category listed above for approval by the Management Committee.

History. The 2017/18 journal publisher change provided AFS a unique opportunity to reconsider how members access certain benefits. For example, the publisher contract included new features such as the ability to offer members open journal access and access to other publisher publications. These new offerings along with other new member benefits (gray literature database, names of fishes, etc), spurred interest in evaluating dues rates, particularly since rates hadn't been adjusted in eight years. Furthermore, AFS was facing declining royalties from online subscriptions and higher costs from implementing Reno recommendations for new Editor in chief positions and new editorial staff, to name a few. These factors combined with noting how comparable rates for similar organizations were generally higher than AFS's rates, led AFS to evaluate and eventually pass dues adjustments for the 2018 member year. Since 2018, member rates have remained the same.

Individual Member Dues Rates History

Category*	2000-2003	2004-2005	2006-2009	2010 - 2017	2018 - 2020	2021 (Proposed)
Regular**	\$76	\$76	\$76	\$80	\$95	\$100
Student	\$38	\$38	\$19	\$20	\$25	\$27
Retired	\$38	\$38	\$38	\$40	\$50	\$52
Early Career	n/a	\$38	\$38	\$40	\$50	\$52
Lifetime	\$1,736	\$1,737	\$1,737	\$1,737	\$1,737	\$1,739

* Low and Middle Income Country not listed as no changes are proposed for that category.

** In the years leading up to 2000, dues were increased by \$1 to \$2 per year for regular members.

Membership Counts by Year

Member types	2016	2017	2018	2019	2020 YTD
Regular	3403	3469	3313	3470	3212
Early Career	895	1094	1043	996	918
Student	1515	1632	1664	1721	1336
Retired	363	383	423	440	467
Lifetime	760	759	758	761	768
Totals	6936	7337	7201	7388	6701

Total Individual

Member Dues Revenue	\$359,000	\$378,000	\$436,000	\$454,000	\$456,000 (budget)
---------------------	-----------	-----------	-----------	-----------	-----------------------

Budget Impact from 2021 Dues Increase

\$5 regular / \$2 all others = **\$23,038** of additional revenue

Comparable Society Dues Rates

The Wildlife Society Dues Rates (2020)

- Regular (\$83 USD annually)**
 Wildlife professionals and all others interested in supporting wildlife science, management and conservation.
[Click here to join today!](#)
- New Professional (\$52 USD annually)**
 Graduates of a full-time, college-level wildlife or directly-related curricula and who have less than three years employment experience in the wildlife profession.
[Click here to join today!](#)
- Student (\$42 \$37 USD annually), Sponsored by the Boone and Crockett Club**
 Full-time or part-time college students pursuing a career in wildlife conservation and management. Student membership may not exceed seven years.
[Click here to join today!](#)
- Retired (\$42 USD annually)**
 Individuals who are retired from full-time employment and have been a TWS member for 25 or more years.
[Click here to join today!](#)
- Family (\$127 USD annually)**
 Family Membership is available to any two wildlife professionals residing at the same address and includes a single copy of the magazine. **Both individuals must complete separate application forms that use the same address.** Only one dues payment is made. Mail both forms with payment. The household receives one copy of *The Wildlife Professional* (and digital access) through this membership.
[Click here to join today!](#)

ESA Member Dues Rates (2020)

Membership pricing

2020 Regular Membership

Annual Income	Dues
Under \$40,000	\$70
\$40,001 – \$60,000	\$108
\$60,001 – \$100,000	\$130
\$100,001 – \$150,000	\$160
Over \$150,001	\$185

Student Membership

\$37 – copy of valid student ID card required by email to the [ESA membership office](#). Please also inform us your anticipated degree (BA, MS, PhD, etc.) and anticipated degree year in the email.

Life Membership

\$2,750 – Enjoy lifetime membership benefits offered through the Society. Chapter and section memberships must be renewed on an annual basis.

Contributing Membership

\$300 – provides an additional level of annual support to ESA.

Developing Country Membership

Developing Country	Dues
Developing Country Student	\$23
Developing Country	\$57

Developing Country Memberships are available to individuals who are citizens of a developing country and currently residing in that country. For a list of developing countries, select the following link.

[Worldbank™ Country Classifications](#)

Attachment E –

MOTION: That the AFS Rules (Section 14. Standing Committees) be amended to designate Climate Change as a Standing Committee of the American Fisheries Society.

Wording to be inserted in AFS Rules, Section 14. Standing Committees:

CLIMATE CHANGE COMMITTEE provides leadership and oversight for AFS communications, outreach, policy, programs, and activities related to the effects of climate change on fisheries and other aquatic resources.

BACKGROUND:

1. As a professional society, AFS has been at the forefront of climate science for over 40 years. Some of the early work on climate change impacts on fisheries and aquatic systems was presented at AFS meetings and printed in AFS books and journals.
2. A Special Committee on Climate Change was designated by AFS President Scott Bonar with three working subcommittees (Science, Policy, and Communications). These committees have provided highly valuable service in further developing actions for AFS on climate change and its effects on fisheries.
3. AFS has led an international effort to develop a statement by the world's fisheries and aquatic societies on climate change. This has been endorsed by over 100 societies from throughout the world.
4. AFS and its members have clearly recognized that climate change will impact our fisheries and aquatic resources for decades to come if not in perpetuity. The need to fully engage the Society in addressing this issue is paramount and requires a formal body to focus efforts of members and staff.
5. The Standing Committee on Climate Change would serve several ongoing roles:
 - Develop training, symposiums, workshops, and other events to bring together experts and the membership to advance work on climate change.
 - Develop communications tools, outreach efforts, and other activities to help appropriate audiences understand the effects of climate change on fisheries and aquatic systems.
 - Produce regular communication with AFS members and others describing climate change activities within AFS by including articles in AFS publications, use of AFS social media channels and other means as appropriate.
 - Develop partnerships with expert organizations to enhance our collective ability to engage in and support science, communications, policy, outreach, and other efforts to advance work on climate change issues.
 - Assess the state of ongoing AFS programs on climate change to determine effectiveness and to offer recommendations for program improvement and for additional new programs.
 - Work with staff, AFS members, and others to obtain funding to support our efforts related to climate change through proposal writing, engaging with foundations and other funding sources, working with AFS Development staff, and other activities as appropriate.

PROCEDURE:

1. Creation of a new Standing Committee requires amendment of the AFS Rules.
2. The Rules may be amended by a simple majority of Active Members voting at an annual or special Society meeting.

Attachment F – Retired Member Program

Proposed Motion:

The AFS Governing Board endorses further exploration of the concept of a Retired Members program as described in the document authored by Don Jackson et al. The AFS President is encouraged to develop a working group, chaired by Don Jackson, to further research the proposal and provide to the Governing Board a full set of recommendations for further action. It is requested that at least initial recommendations are presented to the GB at the midyear meeting and a full report by the Baltimore meeting.

Background Statement

American Fisheries Society

Senior Professional Engagement Initiative

A Proposal

By

Donald Jackson, Cindy Williams, Jeff Boxrucker, Mark Porath,

Brian Murphy, Scott Bonar and Doug Austin

The American Fisheries Society is a member-centric, professional, scientific organization with a focus of advancing good fisheries science and management through, with, and beyond its members, at every stage of their professional sojourn. This is done via many conduits tailored to the specific needs of members individually and corporately. We are a “can do” organization that is quick to recognize opportunity and equally quick to initiate thoughtful action.

Civility, nurturing and professional/personal support define the American Fisheries Society. It is a synergistic institution founded upon recognition of our humanity. Although science requires critical thinking and focused questioning, members of the American Fisheries Society have from the organization’s inception recognized that science is conducted by people, not machines, and that people live and work along an evolutionary path. We need to (and do!) support and encourage one another. We therefore build bridges where necessary, and shine light upon the path when fog obscures vision. Sometimes this path can be a continuum. Sometimes this path comes in rather discrete chapters. Regardless, transitions along the way can generate challenges.

The American Fisheries Society understands that we live and work in the present tense, but that to be most effective we need to listen to the echoes from the past and to the winds that proclaim the future. Blending these elements creates a symphony of incredible beauty and power.

We've done and continue to do excellent work with mentoring young professionals as they move into their careers. We celebrate the vibrancy of youth and support their dreams and aspirations. Equally, we work hard to ensure that established/seasoned professionals are afforded opportunity to "charge their batteries" and rekindle the flames that launched them on their journey to excellence in their chosen fields. In the above regard we are sensitive to and proclaim the strength that comes to the fisheries profession through diversity in its many and varied manifestations.

As is the case for many organizations, AFS is witnessing an ever increasing number of 'baby-boomer' retirements. This is cause for concern. With seasoned fisheries professionals leaving the workforce more than ever before in the history of AFS, institutional memory and expertise may be lost irretrievably. To avert such loss, as well to address special needs experienced by the senior professionals in our ranks, sustained post-retirement engagement seems to be an essential element. In other words, retirement from paid employment need not and should not mean retirement from AFS or from the fisheries professions.

There are questions that need to be addressed by AFS in this regard.

Specifically:

1. What is AFS doing to support those within our ranks who are entering (or have entered) the sunset chapter of their careers?
2. Are we, as members of AFS, cognizant of the special challenges that senior professionals encounter as they move aside and make space for emerging cohorts in the field?
3. Are we, as members of AFS, prepared to fully engage and utilize the treasures held within the minds and memories of the elders?
4. Are we, as members of AFS, honoring senior professionals and supporting them in ways that give them assurances that they invested their lives, their little snippet of eternity, for something worthy and meaningful?"

In many ways, AFS is doing a good job. AFS has numerous prestigious awards that recognize distinguished work. We encourage and support initiatives that often utilize the expertise of senior professionals (e.g., editorships, book projects, chairing symposia, leading task forces, serving as our ambassadors for national, international and governmental assemblages). We also understand that when an elder dies, it is like burning a library. Yet questions linger...

Have we utilized all (or at least most) of the "books" in that elder's "library"? And, of equal importance, does the elder understand that we care deeply about the collection that she/he amassed in that memory library over her/his career? It is, absolutely, our intention to safeguard it. Even more, however, does the elder know that we care very much about her or him as a person; and that as members of a very human organization we want to celebrate their humanity?

Additionally, are we sensitive to the "quiet" and the unique and sometimes almost overwhelming challenges stemming from that "quiet"? Understanding what a senior colleague experiences

toward the end of a career, or in retirement, following years on the front lines of professional engagement, is vitally important. Do we understand the extent to which personal identities can be wrapped within a profession; the extent to which professionals in our ranks are energized through interaction with students and professional colleagues in the field; and the challenges that ensue when our professional (and personal) “batteries” lose these charging elements?

To address the special needs and challenges of our senior colleagues as they transition into the sunset of their careers, and our needs as a scientific society to garner the gifts of our professional colleagues to the extent possible, we propose several avenues for consideration by the AFS Governing Board.

A. Promoting/enabling trans-generational activity

We envision AFS meetings incorporating bridge-building sessions wherein senior/retired professionals engage younger professionals in stand-alone activities such as:

1. Lectures
2. Field excursions
3. Technical sessions
4. Reverse mentoring (teaming young professionals with older ones)

This last item, reverse mentoring, would generate a pathway for young professionals to reach out to the older ones and share the young professionals’ contemporary expertise and perspective, as well as energy, with the older professionals. The energy would flow both ways but the emphasis would be on relationship building and continuing communication and engagement.

These interactions can be incorporated into all of the other items (1-3). Younger or mid-career professionals in the same arena(s) could help (and be helped by) the older professionals as they collectively organize, moderate and conduct lectures, field excursions and technical/experience exchanges. We already do this to a large extent! This could generate enhanced, formalized, trans-generational synergism during our society meetings at all levels.

The Program Committee(s) for the meeting(s) in question could pick the topic(s) and select the trans-generational “teams”. Sponsorships to defray expenses could be encouraged.

B. Promoting/enabling opportunities for continuing engagement.

1. Develop an interactive, computer-based framework, hosted by AFS, that provides a template within which senior professionals can provide specific information regarding **area(s) of expertise**, temporal availability (when available and duration of availability), language skills, an abstract of their CV, and contact information.

2. Make this listing of professional expertise available for worldwide distribution among government institutions, international agencies, non-governmental organizations, and private/corporate interests.
3. Develop an interactive, computer-based framework, hosted by AFS, that provides a template within which senior professionals can provide specific information regarding **avocation/hobby interests** (e.g., “Fishing Buddies), geographic region of interest (if any), temporal considerations, and contact information.
4. Identify opportunities at meetings to introduce the concept and open the sessions to anyone interested in participating in discussions. Face-to-face discussions are just as important as the virtual ones.

Attachment G1 – Cooperative Research with Stakeholders Section Proposal

Proposed Motion for AFS Membership Vote:

Establish a Cooperative Research with Stakeholders Section (CRSS) of the American Fisheries Society.

Background: The purpose of the new section is to advance the Society's promotion of scientific research and sustainable management of fisheries resources by encouraging and facilitating research partnerships among scientists, stakeholders, and resource users, especially commercial fishermen/harvesters and recreational anglers. Specifically, the CRSS will undertake a variety of important activities that currently are not the primary focus of other Society sections, including:

- Supporting on a regular basis innovative annual meeting symposium topics and formats, including panel discussions, to raise the profile of scientists and stakeholders involved in cooperative research, increase general awareness of such research, and share lessons regarding cooperative research successes and challenges.
- Promoting the integration of fisheries science information end users (including managers and stock assessment biologists) into cooperative research endeavors to ensure research project success and greater understanding of scientific processes (including stock assessments) among stakeholders.
- Supporting annual meeting attendance and Society membership for fishermen, anglers, and other collaborative research stakeholders.
- Partnering with other Society sections to ensure that various aspects of cooperative research are highlighted and enhanced.
- Developing blogs, webinars, workshops, and continuing education courses to further the objectives of the CRSS.
- Leveraging resources from industry partners to increase a greater variety of stakeholder involvement at annual meetings.
- Expanding Society membership diversity by exploring additional membership levels for fishery stakeholders including fishermen and anglers.

The section will be open to all active members of AFS.

Establishment of a new section of the American Fisheries Society necessitates an amendment to the existing AFS Rules, which requires approval by a simple majority of AFS members. The AFS Management Committee and AFS Governing Board have approved the proposed bylaws for the new section (attached), and AFS Headquarters has certified a petition of more than 100 signatures of AFS members in good standing.

Attachment G2 – Proposed bylaws for CRSS

Bylaws of the Cooperative Research with Stakeholders Section of the American Fisheries Society

Article I. Name and Objectives

The name of this organization shall be the Cooperative Research with Stakeholders Section of the American Fisheries Society, hereinafter referred to as the CRSS.

The objectives of the Section shall be those of the Society as set forth in Article I of the Constitution. In addition, the CRSS also has the following objective:

Advance the Society's promotion of scientific research and sustainable management of fisheries resources by encouraging and facilitating research partnerships among scientists, stakeholders, and resource users, especially commercial fishermen/harvesters and recreational anglers.

The CRSS promotes varying levels of involvement from participating resource users along the spectrum of cooperation, including citizen science. When done properly, cooperative research can increase stakeholder buy-in to science and decision-making processes and ensure incorporation of local ecological knowledge into fishery management processes. The CRSS aims to increase stakeholder participation in fisheries science and the Society, and to encourage scientists to pursue collaborative research using continuously evolving best practices and lessons learned. Specifically, the CRSS will undertake a variety of important near-term and longer-term activities that currently are not the primary focus of other Society sections, including:

- Supporting on a regular basis innovative annual meeting symposium topics and formats, including panel discussions, to raise the profile of scientists and stakeholders involved in cooperative research, increase general awareness of such research, and share lessons regarding cooperative research successes and challenges.
- Promoting the integration of fisheries science information end users (including managers and stock assessment biologists) into cooperative research endeavors to ensure research project success and greater understanding of scientific processes (including stock assessments) among stakeholders.
- Supporting annual meeting attendance and Society membership for fishermen, anglers, and other collaborative research stakeholders.
- Partnering with other Society sections to ensure that various aspects of cooperative research are highlighted and enhanced.
- Developing blogs, webinars, workshops, and continuing education courses to further the objectives of the CRSS.
- Leveraging resources from industry partners to increase a greater variety of stakeholder involvement at annual meetings.
- Expanding Society membership diversity by exploring additional membership levels for fishery stakeholders including fishermen and anglers.

All activities of the CRS shall conform to the Society's Constitution, Rules, and Procedures.

Article II. Membership

1. Membership in the Section shall be open to all individual or institutional members of the Society having an interest in cooperative research.
2. Only active members of the Society may vote, hold office, or chair a committee.

Article III. Officers

1. The officers of the Section shall be the President, Vice President, Secretary, and Treasurer. The Secretary and Treasurer positions may be filled either separately or as a combined single position.
2. All officers must be in good standing with the Society.
3. All officers shall serve for a term of two years. The offices of Secretary and Treasurer can be renewed for one term without an election. The President can hold a consecutive term if:
1) the current President is re-elected by the membership; and 2) if the Vice President agrees to defer his or her term for two years.
4. Officers shall be elected by a majority of ballots cast by the CRS membership. Elections may be conducted electronically or by other methods determined by the Executive committee.
5. Terms of newly elected officers will begin at the annual CRS business meeting.
6. In the event of a vacated position, the Executive Committee shall appoint a qualified replacement to fill the unexpired term.
7. No elected officer or appointed committee member of the CRS shall receive any salary or other compensation. Expenses associated with Section-related activities may be defrayed from funds available to the Section when authorized by the Executive Committee.

Article IV. Duties of Officers

1. The President shall:
 - a. Chair the Executive Committee of the Section;
 - b. Preside at all meetings of the Section;
 - c. Appoint all Committee members, and may serve as an ex-officio committee member;
 - d. Represent the Section as a member of the Society's Governing Board;
 - e. Oversee the Section's fiduciary responsibility by communicating with the Treasurer to ensure that the Section's funds are managed appropriately, and that required IRS reporting is completed annually;
 - f. Ensure that the Section website is updated;
 - g. Ensure that at least one CRS newsletter per year is sent to members;
 - h. Assist the President with planning and implementing CRS activities; and
 - i. Perform other duties as may be requested by the Executive Committee.
2. The Vice President (President Elect) shall:
 - a. Serve on the Executive Committee;
 - b. Perform the duties of President in the absence of the President;
 - c. Assume the office of the President in the event that the office is vacated;
 - d. Accede to the Presidency upon completion of the term of Vice President;
 - e. Prepare an annual work plan before taking office as President; and
 - f. Perform other duties as may be requested by the Executive Committee.
3. The Secretary shall:
 - a. Serve on the Executive Committee;
 - b. Keep the official records of the Section;

- c. Maintain a current list of the Section membership;
 - d. Record meeting minutes and distribute them to the Section within 30 days after the meeting;
 - e. Assist the President in preparing the annual report to the Society;
 - f. Conduct CRS elections; and
 - g. Perform other duties as may be requested by the Executive Committee.
4. The Treasurer shall:
- a. Serve on the Executive Committee;
 - b. Collect and be custodian of Section funds;
 - c. Disperse funds as authorized by the Executive Committee;
 - d. Submit a CRS annual financial report as required by the AFS Governing Board Reporting process prior to the annual Society meeting;
 - e. Complete required IRS reporting on an annual basis; and
 - f. Perform other duties as may be requested by the Executive Committee.
5. The Committee Chairs (see Article VII for details) shall:
- a. Report their Committee's activities, findings, and recommendations as required in Article VII (3);
 - b. Assist the other officers as needed; and
 - c. Perform other duties as may be requested by the Executive Committee.

Article V. Executive Committee

- 1. The Executive Committee shall consist of the elected officers of the Section and the chairs of the Communications and Outreach Committees.
- 2. Executive Committee meetings are called by the President.
- 3. The Executive Committee shall have the authority to determine policies and conduct business consistent with the objectives of the Section.
- 4. Meetings of the Executive Committee may be held at the call of the President when at least a quorum, as defined in Article V (6), can meet and conduct business.
- 5. Business and voting by the Executive Committee may be conducted by mail or virtually (i.e., via conference call or WebEx).
- 6. A quorum is required for transaction of official business at an Executive Committee meeting. A quorum for an Executive Committee meeting shall consist of at least three members.
- 7. Each member of the Executive Committee shall have one vote on Executive Committee decisions. In the event of a tie, the President may cast the deciding vote.
- 8. The Executive Committee shall establish annual dues subject to approval by CRS members attending the annual business meeting.

Article VI. Meetings and Voting

- 1. Decisions at Section business meetings and on behalf of the Society shall be in accordance with the Society's Constitution, Rules, and Procedures, and the CRS Bylaws.
- 2. A quorum at business meetings shall be 10 members of the Section.
- 3. The latest edition of Robert's Rules of Order shall govern all applicable cases not covered by these Bylaws.
- 4. Balloting shall be completed at least two months before the annual meeting of the Section by either mail or electronic media.
- 5. Officers shall be elected by a simple majority of the returned ballots. Proper care will be taken

- to ensure confidentiality and anonymity of both mail and electronic ballots. In the case of a tie vote, the election will be decided by a simple majority vote of the Executive Committee.
6. In the event of a vacated position, the Executive Committee shall appoint a qualified replacement for the remainder of the term.

Article VII. CRS Committees

1. Committees and Chairs of committees, except as listed in Articles III and V of these Bylaws, shall be appointed and charged by the President.
2. Special Committees serve to accomplish a specific purpose and shall cease to function upon the discharge of the duties for which they were appointed or with the end of the term of the appointing officer.
3. Standing Committees help the President and the Executive Committee conduct the Section affairs, and the Chairs shall report their committee's activities, findings, and recommendations at Section meetings and interim meetings of the Executive Committee.
4. The following Standing Committees composed of Section members in good standing shall be appointed by the President together with their chairpersons, who are expected to change periodically:
 - a. Communication Committee. The Communication Committee shall be responsible for and maintaining the Section's Website, Social Media accounts (e.g., Twitter, Facebook), and newsletter. The Committee shall consist of the Website Webmaster, Twitter and Facebook manager, the Newsletter Editor, and other Section members as necessary and appointed by the President. The Chair of the Website and Social Media Committee will serve as a member of the CRS Executive Committee.
 - b. Programs Committee. The Programs Committee shall be responsible for CRS events including (but not limited to) organizing webinars, workshops, and/or symposia.
 - c. Stakeholder engagement committee will be responsible for securing and distributing funding to assist industry members with attending regional and annual Society meetings. This committee will also support other sections and sub-units in industry engagement activities.

Article VIII. Amendment of Bylaws and Procedures

1. The bylaws are the defining document for the Section and take precedence over all other rules and procedures of the Section.
 - a. The Section bylaws may be amended by a vote of 2/3 of the Section members voting on the amendment, provided that the proposed amendment(s) are circulated to the membership at least 30 days prior to voting.
 - b. In accordance with the Society's Constitution, an amendment shall be reviewed by the Society's Constitutional Consultant prior to the Section's vote for conformity with the Constitution, Rules, and Procedures of the Society.
 - c. The Constitutional Consultant presents the adopted amendment to the Society's Management Committee for approval.
 - d. Amendments take effect when the Section receives written notice of their approval by the Management Committee from the Society Executive Director.
 - e. Procedures of committees and working groups are established to provide continuity in the conduct of Section business. Procedures may be suspended or amended by a simple majority vote of the Executive Committee.

Attachment H - Standards Committee Report

To: Scott Bonar, *President*

From: Jesse Trushenski, *Chair of the AFS Special Committee on Standard Methods*

Date 8-24-20

I. Motion Report: None

- A) Recommended Motion: NA
- B) Minority View: NA
- C) Background for Motion: NA

II. Activity Report

A) Charge or Annual Program of Work:

The Special Committee (SC) was charged with developing a process by which the Society may propose, evaluate, and accept/reject methods as being the Society-endorsed means of doing something in fisheries science. The charge was not to evaluate methods, but to recommend a process by which proposed standards could be assessed and adopted by the Society.

B) Annual Financial Report: NA

C) Summary of Outcomes and Accomplishments:

Note that the activities of the SC do not specifically address any of the strategies identified in the current AFS Strategic Plan, but are perhaps best considered supportive of or related to Strategy 5.4 (Use best available techniques such as surveys, focus groups, social media, and other means to determine and respond to the needs, interests, and opinions of AFS members) and Strategy 1.3 (Foster use of standards/best practices for fisheries conservation and management).

The SC was comprised the following individuals based on their expertise and/or roles within the Society:

Jesse Trushenski, experience with Good Laboratory Practices, AOAC International standard methods, SOP development, and past Chair of Resource Policy Committee (RPC)

Joe Conroy, contributor to AFS Standard Sampling book

Julie Simpson, Chair of the Communications Committee and professional experience with method standardization

Jeff Koch, contributor to AFS Standard Sampling book

Tom Dowling, Co-Chair of the Names of Fishes Committee

Ben LaFrentz, Fish Health Section, experience with FHS Blue Book of diagnostic methods

Additional input regarding the legal implications of AFS actions was solicited from Larry Page (the other Co-Chair of the Names of Fishes Committee) and Doug Austen (AFS Executive Director). Attempts were made to involve the Publications Oversight Committee (POC) to address implications of method standardization for publishing in AFS journals but the POC Chair did not identify a representative to the SC.

If the Society is to begin endorsing certain practices as 'standard methods', it is essential that there be a transparent, inclusive process in place by which proposed standards are solicited, evaluated, accepted/rejected, and periodically reviewed. Our charge was not to evaluate methods, but to recommend a process by which proposed standards could be assessed and adopted by the Society. Further, it is important to differentiate between the work of the SC and those involved in publishing the 2nd edition of the Standard Sampling book. Although the content of this text is an obvious source of methods that the Society may wish to adopt as formally vetted standards, the SC's work and recommendations described herein have no direct influence on the editors/authors and their work to prepare the 2nd edition.

The SC reviewed processes used by the American Public Health Association, AOAC International, and Fish Health Section for validating/standardizing methods. We also reviewed the analogous process by which the Society develops policy statements via the RPC. Although the specifics vary from one organization to the next, they can be generalized as follows:

- **Proposed standards are received** (solicited or unsolicited) **via an established timeline/process.**
- **Proposed standards are screened initially by an appointed decision-making authority for completeness** (i.e., does the application follow the format and include all required elements) **and appropriateness** (i.e., is this the sort of topic for which our organization should have a standard). If the application passes this initial screening, it is forwarded to an expert panel for a substantive review
- **The proposed standard is evaluated by a panel of subject matter experts who render an opinion regarding whether the application should be rejected or accepted** (provisionally or generally).
- **The proposed standard and expert panel opinion are made available for comment within the organization.** Comments are received and considered by the decision-making authority, in consultation with the applicants and/or expert panel as needed.
- **The decision-making authority renders a final decision and the proposed standard is either rejected or accepted.**

This generalized process appears to be well-accepted and structured to provide for a thorough but timely vetting process, as well as input beyond that of the expert panel/decision-making authority groups.

Securing adequate expertise (knowledge related to standard method development and pertinent subject matter) and building and maintaining capacity was identified as the most significant challenge to implementing a standard methods program. How do we ensure a hypothetical "Standard Methods Committee" does not fall into the trap that has limited productivity of the RPC for years? Establishing and maintaining a body with sufficiently

broad expertise to serve as an expert panel for any/all proposed methods is not viable. The decision-making authority group might be assembled and maintained from year to year, but expert panels would have to be assembled on an as-needed basis. The expert panel nomination and appointment processes need to be transparent. A call for panelists should be openly announced and the credentials/conflicts of interest of panelists should be publicly available. The SC recommends that applicants (those submitting a proposed standard method for consideration) should be required to provide a list of potential expert panelists and that self-nomination be allowed.

The second major challenge identified by the SC was how topics/proposed standards should be identified and prioritized. How do we ensure the process is not overwhelmed with the evaluation of methods that are unnecessary or address relatively inconsequential topics in fisheries science? Standards addressing tools or techniques that are used by large segments of the fisheries community in their daily work should be high priorities. Topics/proposed standards should have buy-in from the relevant subdiscipline/community, and the SC recommends that applicants be required to secure endorsement(s) from the relevant AFS Section(s).

The SC identified funding as another important element of a standard methods program. How do we ensure the development of standard methods does not further stretch limited staff time/availability and create financial liability for the Society? The SC recommends that a reasonable application fee (payable by the applicant or supporting Section[s]) be established to address AFS staff administrative costs, provide honoraria/travel stipends to decision-making authority members or expert panelists, etc. In-kind support (e.g., convening supporting symposia to flesh out proposed standard or solicit input) could be used to defray some of the application fee costs, but the SC recommends that a minimum cash payment be required.

The SC identified several other minor challenges related to the legitimacy and functionality of the standard methods program and offers the following recommended solutions. It is essential that proposed methods must be subject to public comment (i.e., from AFS members) prior to rejection or acceptance by the decision-making authority. Accepted standards must periodically undergo post-adoption review (e.g., every 5 years), preferably by members of the original expert panel. A tiered process with general and expedited evaluation processes might be needed, particularly for proposed standards that are well-established or have already undergone considerable evaluation (e.g., the FHS Blue Book or Standard Sampling book). The SC recommends that a mechanism be created whereby applicants could petition the decision-making authority for expedited review during the application process. Standard methods offer some protection for those who follow these methods should their findings be called into question. However, in the case of legal action, counsel may attempt to attach liability to the standardizing body. The SC recommends that the appropriate disclaimer/non-liability language be developed and prominently included at the beginning of any approved standards to protect the Society against litigation.

The SC concluded that if AFS were to pursue a standard methods program, the simplest means of implementation would be to change the name of the RPC to reflect and expansion of their responsibilities (e.g., Policy and Standards Committee) and to make the necessary changes to the AFS Rules (to change the name and general charge of a Standing Committee) and

Procedures (to redefine the purpose, duties, and operational guidelines of a Standing Committee). The RPC already oversees a largely analogous process for the development of position statements by securing the necessary subject matter expertise to evaluating proposed position statements (i.e., the expert panel) and offering recommendations to the Governing Board (i.e., the decision-making authority), soliciting member input via a structured process, and so on. However, before such changes are made and the RPC is charged with this additional responsibility, the SC recommends that the AFS Governing Board deliberate the relative merits of establishing a standard methods program and whether the value of AFS-endorsed standard methods warrant the associated effort.

Attachment I – Presidential Proposed Plan of Work

President's Plan of Work
Brian R. Murphy
September 2020-August 2021

For Approval by the AFS Governing Board
11 September 2020

Preamble

An effective presidential Plan of Work should be one that implements critical actions and new directions to advance the Society, while protecting the core functions that have made AFS what it is today. To this end, a Plan of Work should be in concordance with the Mission and Vision of the Society:

- **Mission of AFS:** *“To improve the conservation and sustainability of fishery resources and aquatic ecosystems by advancing fisheries and aquatic science and promoting the development of fisheries professionals.”*
- **Vision of AFS:** *To address our mission, AFS needs to advance fisheries knowledge and strive to be the home society for all fisheries disciplines. In that pursuit, AFS seeks to be recognized as the pre-eminent organization providing fisheries information to decision makers in all arenas. While fulfilling our vision, we will recruit and develop new fisheries professionals by offering learning and training opportunities crucial to maintaining a well-trained profession, support programs and efforts to increase diversity and inclusion, and enhance the value of AFS professional certification.*

A team of dedicated AFS members has just completed an updated Strategic Plan (Bowker et al. 2019) to guide the Society forward over the next 5 years, which includes these specific objectives:

Objective 1. *Advance fisheries disciplines, conservation, and management.*

Objective 2. *Develop fisheries professionals.*

Objective 3. *Communicate the importance of both the science and the value of fisheries discipline.*

Objective 4. *Increase diversity among fisheries professionals and promote an inclusive environment in AFS.*

Objective 5. *Provide effective governance of AFS and high-quality service to AFS's members.*

Plan of Work

I have identified four high-priority areas of focus for my term as president of AFS:

1. To increase public visibility and trust in the work of our profession and of our Society.
2. To redouble our efforts to increase diversity and improve equity and inclusion within our profession and our Society.

3. To help AFS members further their careers by: a) developing or enhancing critical professional skills; and b) enhancing the benefits of professional certification.
4. To move forward from research to planning and action related to rebranding needs for AFS as we celebrate our 150th anniversary.

Strong ties between these objectives make it impossible to completely separate them relative to actions needed. Actions executed in this plan will support the theme of the 151st Annual Meeting of AFS in Baltimore, Maryland: ***Investing in People, Habitats, and Science***.

Plan Details

1. To increase public visibility and trust in the work of our profession and of our Society.

The unassailable truth is that public trust in scientists and their work has been severely eroded in recent years. This is in part due to a rise of populism, wherein “the people” are pitted against “the elite” (who are commonly described as the political, economic, cultural, or educational establishment, “who put their own interests above those of the people”). Distrust of “educated elites” (including scientists) is often the result of propaganda campaigns against facts that do not serve the personal interests of those in power. Thus we are now said to live in a “post-truth world” where fact and expert opinion are given less weight than emotion. Fisheries science is not exempt from these phenomena, particularly as we take a larger role in disseminating “unpopular facts” such as the impacts of climate change on aquatic resources.

Actions:

- Expand AFS efforts to distribute engaging, factual fisheries information to policymakers and the public, including continuation of significant outreach efforts regarding the impacts of the rollback of environmental regulations and the effects of climate change on aquatic resources.
- Continue/expand collaboration with other aquatic societies to strengthen and expand our public messaging regarding critical issues in aquatic conservation.
- Expand, as possible, AFS staff in the area of outreach communications.
- Train AFS members to improve communications with lay audiences across a variety of media outlets.
- Expand the quantity of important materials from AFS publications (similar to the current Featured Papers program) that are publicly accessible outside of the Society, and aggressively advertise and distribute these.

- Engage the creators of the “The Fisheries Blog” to discuss how their approach and efforts might be integrated with AFS efforts to accomplish this objective.

Strategic Objective(s) addressed: 1, 2, 3.

Units to engage: Committees (Climate Change, Communications, Continuing Education, Resource Policy); Sections; Staff.

2. To redouble our efforts to increase diversity and to improve equity and inclusion within our profession and our Society.

Several recent AFS presidents have made increasing the diversity of our profession and of AFS membership important objectives during their administrations, and AFS has made some advances in these areas. But still, neither our profession nor our membership are yet close to being representative of the public that we serve. Overall, membership in AFS is still 74% male and 92% Caucasian. We must continue the diversity initiatives that we now have in place and expand them where possible, and we need to look for new ways to welcome underrepresented groups into our profession and AFS. One almost untapped potential pool is high-school students. If we can recruit high-school students into AFS to give them a chance to see what our profession does, this should help increase the flow of students into fisheries higher-education programs and eventually our profession. And carefully targeted high-school recruitment efforts also should help increase the proportions of underrepresented groups in AFS, higher education, and our profession as a whole.

Actions:

- Elevate the Special Committee on Diversity & Inclusion to become the Standing Committee on Diversity, Equity, and Inclusion. Charge the committee to: review the *Nine Proposed Action Areas to Enhance Diversity and Inclusion in the American Fisheries Society* (Penaluna et al. 2017); report on AFS successes and shortcomings in these areas; make recommendations for meaningful benchmarks against which we can measure progress; and make current recommendations to accomplish meaningful progress in these areas.
- Engage a broader spectrum of AFS subunits and members in efforts to improve diversity, equity, and inclusion in our Society and our profession.
- Appoint a Special Committee for Student Outreach Planning to develop a strategic plan for how to best disseminate information regarding the new AFS High School Membership category, and to recruit new High School members to AFS. This plan should include recommendations for the use of social media, a special landing page for these students at the AFS website, ideas on developing appropriate AFS materials for these members, ideas on linking new High School members to AFS mentors, and specific strategies to target underrepresented groups.

- Encourage student subunits and state chapters to reach out to local high schools, particularly those serving underrepresented groups, regarding AFS and career opportunities in fisheries science, and to invite high school students to their events.
- Create a “Sponsor a Student” program whereby AFS members could sponsor the membership of a high-school student as part of their annual AFS renewal.
- Continue and expand as possible the Hutton Scholars Program, and consider strategies to increase its reach and impact beyond the summer internship.
- Create collaboration between the Hutton Program and university fisheries programs (possibly through the Education Section and NAUFWP) to provide information to all Hutton applicants regarding university fisheries programs and careers in fisheries science.
- Explore expansion of AFS’s role in the Diversity Joint Venture.
- Engage the Equal Opportunity Section, and other subunits and members, as advisors on these outreach efforts.

Strategic Objective(s) addressed: 1, 2, 4.

Units to engage: Standing Committee on Diversity, Equity, and Inclusion; Sections (Equal Opportunity; Native Peoples Fisheries; Education; Student & Early Career Professionals; others); Chapters and Student Subunits; Members; Staff.

3. To help AFS members further their careers by: a) developing or enhancing critical professional skills; and b) enhancing the benefits of professional certification.

The world is not static, and we all know that professionals must be lifelong learners. AFS is committed through its Mission Statement to help members stay current in our field, and to learn new skills to operate in a world that is changing both physically and politically. AFS should be instrumental in offering professional development opportunities for members at all levels. Professional certification by AFS should be tied closely to professional development opportunities, and members should see tangible benefits to becoming certified.

Actions:

- Survey members to determine specific skill gaps that they perceive as impediments to their professional advancement. Survey all AFS subunits, and professional organizations, to identify types of training they offer that have been most beneficial to their members.
- Further increase onsite and online offerings of courses identified as highly valuable by members; partner with Divisions and Chapters as appropriate to increase geographic spread of offerings.

- Train AFS members how to communicate better with lay audiences across a variety of media outlets and live interactions.
- Explore a tiered system of certification credit toward AFS certification for CE offerings, based on complexity and timeliness of the topic.
- Initiate discussions with agency administrators and other employers regarding creation of tangible benefits for AFS-certified employees.
- Recognize certified members with a unique ribbon at AFS meetings, and/or a professional pin for general use in their professional work.
- Expand online recognition of certified members (e.g., AFS Website, directory, Newsletter, etc.).
- Consider offering certification to non-members, at a much-increased rate.

Strategic Objective(s) addressed: 1, 2, 3, 5.

Units to engage: Continuing Education Committee; Education Section; Board of Professional

Certification; Student and Early Career Professionals Subsection; Staff.

4. To commence the rebranding of AFS as we celebrate our 150th anniversary.

AFS contracted the firm Potomac Communications Group (PCG) in 2018 to help evaluate our brand, including our name, logo, perception among key stakeholder groups and the “value proposition” that it communicates to internal and external audiences. The results showed that AFS members and stakeholders feel that the mission and values of AFS are not always clearly identified, particularly to outside groups. The Communications Committee has been discussing the results of the study, and is formulating plans to “rebrand” AFS in ways that make it more visible and relevant to parties both inside and outside the Society. Rebranding actions should consider ways to fully recognize and display the commitment and efforts of our Canadian and Latin American members.

Actions:

- Empower the Communications Committee to move forward to create recommendations regarding an array of Society rebranding actions.
- Assist wherever possible the emerging effort to create a geographically broad Latin American Chapter of AFS.

Strategic Objective(s) addressed: 1, 2, 3, 4.

Units to engage: Communications Committee; Governing Board; AFS subunits; Members; Staff.

References

- Bowker, J., T. Bigford, S. Bonar, J. Defilippi-Simpson, R. Essig, J. Jackson, S. Midway, and M. Murphy. Charting the course for the American Fisheries Society: Strategic Plan for 2020-2024. *Fisheries* 44(3):119-122.
- Penaluna, B. E., I. Arismendi, C. M. Moffitt, and Z. L. Penney. 2017. Nine proposed action areas to enhance diversity and inclusion in the American Fisheries Society. *Fisheries* 42(8):399-402.

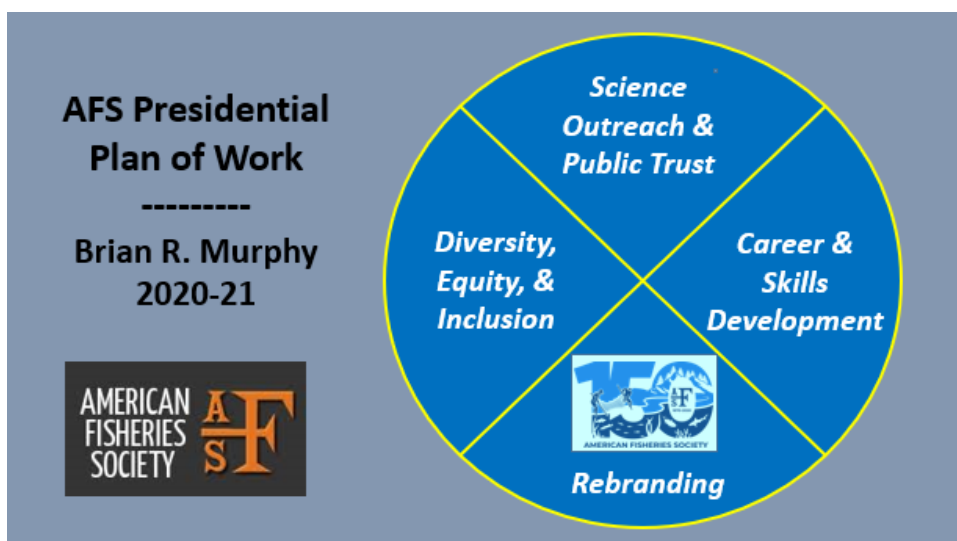
New President's Comments
American Fisheries Society
Business Meeting
22 September 2020



New President's Comments
American Fisheries Society
Business Meeting
22 September 2020



Brian R. Murphy



1. Science Outreach & Public Trust

"What has died is any acknowledgement of expertise as anything that should alter our thoughts or change the way we live."

— Tom Nichols, *The Death of Expertise*



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1. Science Outreach & Public Trust

US death toll from coronavirus tops 200,000, highest in the world

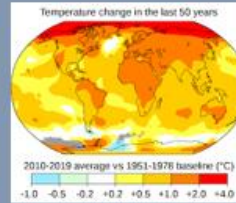
By Carla K. Johnson Associated Press, Updated September 22, 2020, 2 hours ago



A woman passed a fence outside Brooklyn's Green-Wood Cemetery adorned with tributes to victims of COVID-19 in New York. MARK LENNIVAN/ASSOCIATED PRESS

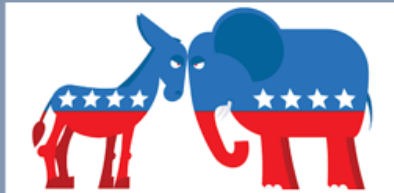


1. Science Outreach & Public Trust



"What has died is any acknowledgement of expertise as anything that should alter our thoughts or change the way we live."

— Tom Nichols, *The Death of Expertise*



Which science you “believe” has largely become dependent on your political leanings. How can we reestablish science as impartial, and meant to serve society as a whole?

1. Science Outreach & Public Trust



"Learning is changing the way that you think about something."

"These are dangerous times. Never have so many people had access to so much knowledge, and yet been so resistant to learning anything."

— Tom Nichols, *The Death of Expertise*

1. Science Outreach & Public Trust

- Collaborate with partner societies to strengthen our messages
- Expand outreach to policymakers and the public regarding crucial issues in fisheries and aquatic conservation
- Expand/advertise public access to AFS publications related to crucial issues
- Explore new outlets and partners for AFS outreach
- Engage outside experts when we need guidance
- Train AFS members in effective outreach communications
- Establish *Climate Change* as a standing committee of AFS

Critical AFS partners:

AFS Subunits/Committees
Members
AFS Policy leaders

SciCom Section
Fisheries Blog
Partner societies



2. Diversity, Equity, & Inclusion

Diversity - - brings fresh viewpoints, new ideas, and better problem solving

Equity - - basic human value and moral imperative

Inclusion - - value and respect people, welcome and facilitate participation by all



"You belong here."

**Human diversity
is critical to
doing the best
science.**

HEALTH
**'Sign me up': Why people of color are
vital to getting a successful COVID-
19 vaccine**
Karen Weintraub USA TODAY
Published 8:14 a.m. ET Aug. 20, 2020 | Updated 9:57 p.m. ET Aug. 22, 2020

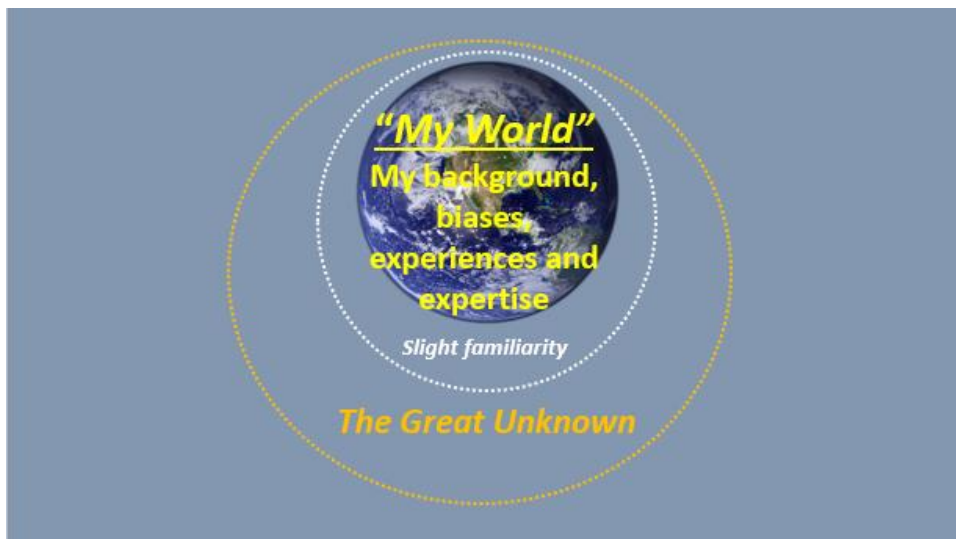


News > Kaiser Health News

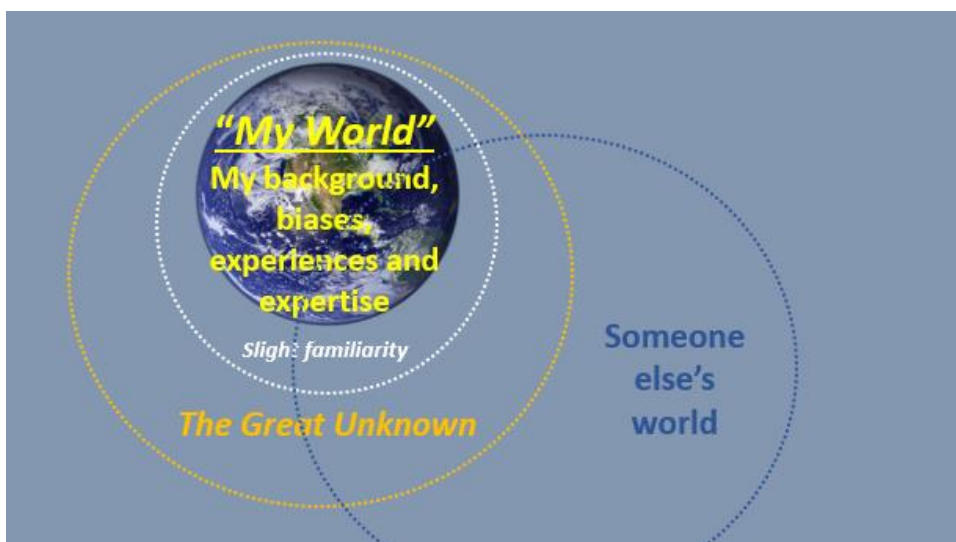
**Will Vaccine Trials Reflect America's
Diversity?**

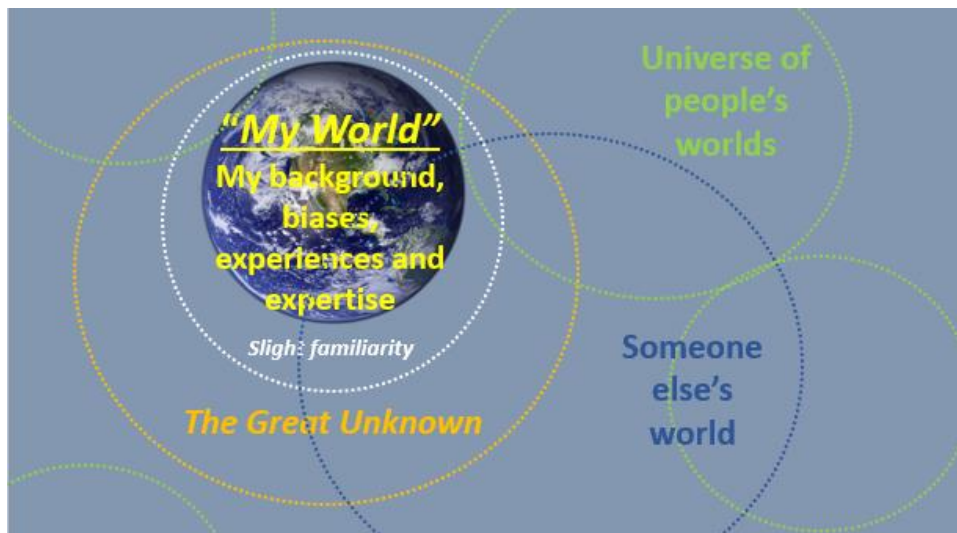
**We all have blinders on when
it comes to certain things . . .**



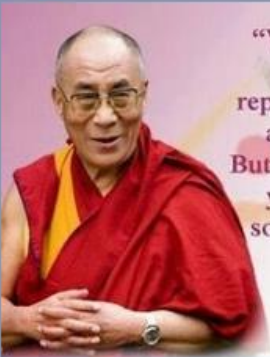


A diagram on a blue background, identical to the one above. To the right of the diagram is a small photograph of a man in a suit, pointing upwards. Below the photograph is a quote in yellow text: *"As we know, there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns—the ones we don't know we don't know."*





Listening is Job 1 . . . for all of us



**"When you talk,
you are only
repeating what you
already know;
But when you listen,
you may learn
something new."**

-DALAI LAMA

"Learning is changing the way that you think about something."

2. Diversity, Equity, & Inclusion



Standing Committee on D, E, & I

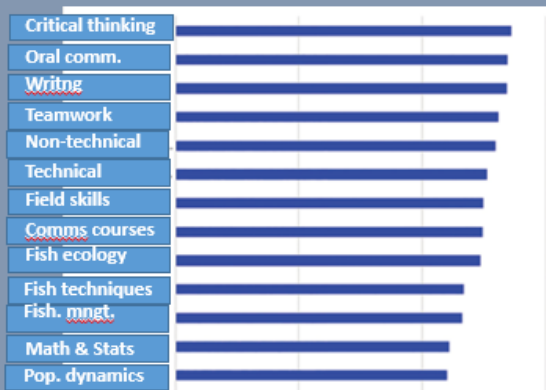
- ENGAGE AFS leadership and members at all levels
- REVIEW & REPORT on current AFS programs
- RECOMMEND future actions and initiatives
- COORDINATE & ADVISE leadership and administration (Divisions, Chapters, Sections, Committees; recruiting, membership, outreach, meetings, awards, publications, etc.)
- COLLABORATE with partners (e.g., DJV, CASS)

2. Diversity, Equity, & Inclusion



- Special Committee for Student Outreach (with Education Section)
 - High school membership development
- Encourage Unit outreach to high schools
- Expand reach of the Hutton Program (w/ NAUFWP)
- AFS leadership in DJV

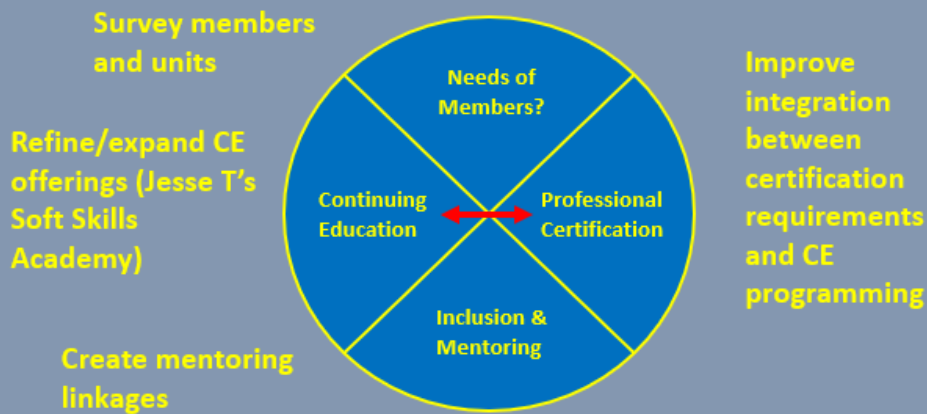
3. Career & Skills Development



Fisheries employers rankings of the relative importance of various jobs skills

McMullin et al. 2016.
Fisheries 41:436-449

Professional Development & Career Advancement



4. Rebranding AFS

- PCG REPORT 2018 –

AFS Brand Revitalization

- *Members and constituents like the name of AFS, but feel that the branding is outdated.*
- *Communications Committee, leadership, and staff will move forward with rebranding ideas.*

AFS Presidential Plan of Work

Brian R. Murphy
2020-21



BALTIMORE 2021



*Investing in
People,
Habitats,
and
Science*

