An Opportunity to Improve Regional Collaboration and Action

Moderator: MAFWA Chairman Douglas (NE)

Participants:
Director Pauley Parker (MO)
Director Moritz (MI)
Kelley Myers, JD, Tallgrass Prairie LCC
Brad Potter, Upper Midwest Great Lakes LCC
Functions

• **Purpose:**
  To provide coordination and science capacity and technical expertise for meeting shared natural and cultural resource priorities.

• **Vision:**
  Landscapes capable of sustaining natural and cultural resources for current and future generations.

• **Mission:**
  – Develop and provide integrated science-based information about the implications of climate change and other stressors for the sustainability of natural and cultural resources;
  – Develop shared, landscape-level, conservation objectives and inform conservation strategies that are based on a shared scientific understanding about the landscape, including the implications of current and future environmental stressors;
  – Facilitate the exchange of applied science in the implementation of conservation strategies and products developed by the Cooperative or their partners;
  – Monitor and evaluate the effectiveness of LCC conservation strategies in meeting shared objectives;
  – Develop appropriate linkages that connect LCCs to ensure an effective network.
Structure

• Organizational Model:
  – Staff
    • Coordinator
    • Science Coordinator
    • GIS, Research, Program Managers, etc
  – Steering Committee
    • State Fish and Wildlife agencies
    • DOI programs, including FWS, NPA, BIA, BLM
    • Federal agencies, including EPA, DoD, ACOE, USDA (Forest Service, FSA, NRCS)
    • NGOs
    • Industry
    • Research Institutions
  – Science Committee/Technical Advisory Groups/Working Groups

Primarily DOI employees (FWS, Reclamation) but also state and university staffed in some instances
Midwest LCCs
Where We Have Been

• Seven years in the making; PPP and UMGL were among the first to constitute

• Major Accomplishments:
  – Gulf Hypoxia Conservation Blueprint
  – Connectivity planning for the Great Lakes and their tributaries
  – Monarch butterfly conservation planning and design
  – Regional SWAP coordination

• National Academy of Science Review
  – Supportive of the landscape approach and unique collaborative nature of the LCCs and the Network.
  – Made a series of recommendations to improve LCC evaluation and reporting metrics; and to evaluate other program offerings that align with the LCCs, like joint ventures and climate science centers to ensure clear delineations of roles and responsibilities.

• AFWA Joint Task Force
  – AFWA Presidential Task Force proposed in 2016 to cooperatively review and discuss the purpose, mission, goals and governance structures of LCCs, the Council and the program; and to jointly address questions posed by the review and jointly develop responsive solutions.
  – Status: Tabled at the AFWA Executive Committee in December 2016.
Where We Are Today

• **FACA Compliance Directive**
  – To ensure compliance with FACA and other new Executive and Secretarial Orders, FWS has been directed not to hold steering committee or planning meetings until after September 2017
  – Affects boards and commissions beyond LCCs and is consistent with past practices

• **Current FY 18 Budget Proposal for FWS**
  – Eliminates Science Applications Program
  – Eliminates DOI coordination of LCCs; does encourage continuation of engagement with collaborative conservation efforts

• **Reflection:**
  – What is the future of collaborative conservation?
  – What is the Department of Interior’s and the State Fish and Wildlife Agencies’ roles with respect to it?
Challenges

- States have primary jurisdiction over fish and wildlife resources not under the jurisdiction of the US FWS but are somewhat limited in funding work outside their geopolitical boundaries.

- The interest of DOI has been to work proactively with partners to reduce the number of species listed as threatened or endangered under the Endangered Species Act and improve sustainability of migratory birds through collaborative and voluntary processes, even without explicit statutory directive to do so.

- NGOs are important partners in planning and implementing conservation strategies but are not primarily responsible to manage the public trust resources of the states.

- States are increasingly finding themselves in critical leadership roles to address species conservation issues, such as Monarch, Sage Grouse and Northern Long Eared Bat.

- Addressing issues surrounding species of greatest conservation need requires planning coordination and implementation across large landscapes.
Discussion

Functions

• What functions of LCCs are value-added to collaborative conservation efforts?
• What functions need improvement or are missing?

Structure

• What governance structure best facilitates collaborative conservation across state boundaries?
• Can we better use the committees and work of the Association of Fish and Wildlife Agencies and the regional associations to implement collaborative conservation?
• What organization or structure is required to maintain a long-range view of conservation?

Identifying and working on priorities

• LCCs have prioritized working on cross-jurisdictional conservation issues and needs identified by the steering committees. Is this approach for identifying priorities working for states?
• Is there a better consistent and more comprehensive way to do this? What role can SWAPs or National Conservation Needs plan in these determinations?
• What should be the role of states, FWS, and NGOs when identifying priorities, research needs, management approaches, and implementing management strategies?
Next Steps?
Thank You

Kelley Myers, kelley_myers@fws.gov
Brad Potter, bradly_potter@fws.gov

U.S. Fish and Wildlife Service
AFWA Government Affairs

Update: Modernizing the ESA
On June 21, AFWA President Nick Wiley requested State Directors complete a review of the AFWA ESA draft redline changes and please let AFWA staff know if you are comfortable with AFWA proceeding with its process to inform and influence Congress on ESA improvements. For more details and important information, please see the email sent by Jen Mock Schaffer on June 21 under the subject of “ATTN REQUIRED: Review of AFWA ESA work.”

Please let us hear from you by June 30, 2017 by replying to Gary Taylor (gi.taylor@comcast.net) or Jen Mock Schaffer (jenmock@fishwildlife.org).

Resilient Federal Forest Act of 2017
The House Natural Resources Committee will mark up HR2936, the Resilient Federal Forests Act of 2017 on June 27, and Chairman Bishop intends it to pass the House before the August recess. The bill remedies the fire borrowing problem in USFS and BLM; reduces NEPA process burden for plans developed by collaboratives; establishes binding arbitration as an alternative to litigation of plans; expedites ESA sect.7 consultation; expands acreage qualification for Categorical Exclusions under NEPA; remedies the Cottonwood decision re ESA sect.7 project v programmatic consultation and other process relief to expedite approval and execution of NFPs and RMPs.

AFWA’s Policy Priorities for the 2018 Farm Bill
In addition to AFWA’s Policy Priorities for the 2018 Farm Bill, AFWA staff is participating in other coalitions seeking to develop consensus on Farm Bill priorities and recommendations, including TRCP’s Agriculture and Wildlife Working Group and the Forests in the Farm Bill coalition, as well as working with agriculture and crop insurance organizations to find areas of common ground. Because AFWA’s platform was adopted and released earlier this spring, we have been well-positioned throughout the process to advocate for our priorities, which are reflected in the draft recommendations of these coalitions. Several hearings have already been held in Congress, with more scheduled for the near future, and AFWA staff will continue to engage with Congress and our partners as we advocate for a strong Farm Bill for conservation in 2018.

USFS Discusses Revamp of 30 Year Aquatic Resource Strategy
AFWA recently hosted a call with the USFS and the state fish chiefs to discuss the USFS Draft National Fish and Aquatic Stewardship Strategy. When finalized the Draft Strategy will replace the Rise to the Future strategic plan that was implemented 30 years ago and seeks to provide a USFS framework for objectives such as; conserving fish and aquatic resources, increasing water dependent recreation, and facilitating collaboration, communication, and cooperation with states, tribes, and non-governmental partners. The USFS plans to review comments on the plan and roll out the updated strategy this Fall.
Thanks to the good work of Jen Mock Schaeffer (AFWA), and leadership by Jeff Crane (CSF) we are now in the final stages of the process with Congressman Don Young’s office for reintroduction of the Recovering America’s Wildlife Act in the House. Mr. Young is committed to leading the charge for this legislation and is ready to work with his colleague, Debbie Dingell of Michigan again to push the bill toward passage in the House. We believe we could have a scheduled introduction as early as later this month, but certainly before August recess. We also felt it was important to have a more formalized campaign governance structure to provide strategic advice and overall guidance to the campaign, so we’ve created a campaign steering committee made up of the co-chairs of the Blue Ribbon Panel working groups, and a couple state directors as well as AFWA President Wiley. We wanted to maintain continuity and oversight from members of the Blue Ribbon Panel and provide good opportunities to engage those organizations/entities represented by the panelists more directly. Thanks to continued leadership and financial support from the states, a new Alliance for America’s Fish & Wildlife campaign logo has been developed and a new campaign website and other branded materials are in production and will be available for use very soon once we have officially launched the campaign (to coincide with the reintroduction of the bill in the House this summer). We are looking to early fall for a director/CEO level advocacy fly-in and a meeting of the Blue Ribbon Panel other events in DC.

We are sure that we will have a House bill reintroduced by then and possibly a Senate bill as well, and will look forward to working with all partners to advocate for co-sponsors of that legislation soon.

WMI Final TRACS Review

Wildlife Management Institute (WMI) conducted a review at the request of the Joint Federal / State Task Force on Federal Assistance Policy (WSFR-JTF), identifying several challenges to the continued development and implementation of TRACS. The challenges include: (1) Developing a communications plan for the WSFR Program, (2) Developing and memorializing a process for amending TRACS, (3) Integrating strategies and objectives into TRACS reporting, (4) Defining the level of detail for TRACS reporting, (5) Resolving outcome-reporting issues in TRACS and its impacts on WSFR grants, (6) Determining ability for non-state entities to access TRACS data, (7) Resolving workload issues caused by duplicative components of TRACS, and (8) Various technical challenges. As the result of this review, WMI has made several specific recommendations that the (WSFR-JTF) and WSFR partners can adopt that will resolve these challenges.

CITES Updates

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Animals Committee will meet from July 18-22, 2017 in Geneva, Switzerland. The CITES Technical Work Group members (Buddy Baker (SEAFWA), Rick Jacobson (NEAFWA), Carolyn Caldwell (MAFWA), Jim deVos (WAFWA) and Deb Hahn (AFWA)) will attend to represent the State Fish & Wildlife Agencies. The agenda and related docs can be viewed at https://cites.org/com/ac/29/index.php. Items of the highest interest to the states include the potential U.S. native species that could be included in a Significant Trade review; discussions on captive bred and ranched species, traceability of wildlife, tortoise and turtle conservation, and sturgeon and paddlefish conservation; and next steps on potential assessments of American Eel and coral species. The Technical WG will provide a meeting report to the Regional Associations.
Project WILD

Updates and Next Steps

Marc LeFebre, AFWA
Kelly Reynolds, AFWA
Lindsay Rogers, NE Game & Parks
Elena Takaki, AFWA
What is Project WILD?

- Wildlife-focused conservation education program for K-12 educators and their students
- One of the most widely used K-12 conservation programs among educators
- Translates the ecology behind agency decisions
- Fosters critical thinking about managing wildlife and natural resources
Strategic Priorities...Where does Project WILD fit in with AFWA?

- **Strategic Priority 3:** Support National Outreach and Education Initiatives such as the National Conservation Outreach Strategy and now...Project WILD
Connecting to Blue Ribbon Panel

• Crucial connection between agencies and the diverse public they serve.
• Agencies extend conservation messaging into schools and educational settings throughout their states, reaching hundreds of thousands of students annually.
Status of Project WILD

- AFWA assumed stewardship of Project WILD March 1, 2017
  - Two staff located in Austin and Houston
  - Director is located in Washington, DC
- Recently held annual coordinators meeting
- Building communications with existing state coordinators and looking for opportunities to re-engage agencies
Where is Project WILD?

- Housed in state agency
- Housed in other type of organization
- Housed in state agency and other type of organization
- No program
Next Steps:

1. Transition: Firm up operations while continuing development of new terrestrial guide
2. Business Planning: Develop financially sustainable business model
3. Strategic Planning: Explore new delivery models, expand partnerships, grow state participation
Updated Guide – Anticipated January Print

- STEM connections
- WILD Work
- Outdoor Learning

Meeting the changing needs of both wildlife agencies and educators

Integrating conservation education from a state fish and wildlife agency perspective
Guide Updates

25 States have Contributed $94,000 to Date
Integrating the North American Model...

- Wildlife & the Environment: Community Survey
- Checks and Balances
- Carrying Capacity
- Migration Barriers
- Deer Dilemma
- Dropping in on Deer
- Natural Dilemmas
- History of Wildlife Management
- Pay to Play
Guiding Principles

• Focus on a conservation literate populace
• Run Project WILD using sound business principles
• State-centric
• Sustainability
Meeting Time and Place
The committee met by conference call on October 3, December 13, February 21, and April 20.

Attendance
Six states participated in the October and February calls, five states participated in the December call, and seven states participated in the April call (see appendix 1). Nine of the thirteen MAFWA states participated in at least one of the calls.

Executive Summary
During the conference calls, Committee members shared progress and obstacles in integrating climate change considerations into fish, wildlife, and habitat management. Actions conducted by individual states include:
- Developing and conducting workshops for agency staff and conservation partners on topics including climate change, adaptation strategies for species and natural communities, and climate change scenario planning.
- Conducting analyses to identify climate change resilient lakes and streams.
- Collaborating with state and federal agencies and conservation NGOs to develop a statewide wildlife and ecosystems climate change response framework.

Committee members have found this information exchange to be very useful, allowing each state to leverage the collective intelligence of the group. However, because a number of states do not participate on the Committee, they do not benefit from the information exchange and coordination.

In addition to sharing information, during the year the Committee collaborated on the development of a National Conservation Needs proposal, provided requested input on a project being developed by the Northeast Climate Science Center, and hosted a webinar on a regional climate change analysis being conducted by The Nature Conservancy.

During our April meeting, the Committee decided to forward a letter to the Directors for action.

Director Action Item
1. A letter to Ryan Zinke, Secretary of Interior, in support of the National Climate Change and Wildlife Science Center and the network of regional Climate Science Centers.

Director Information Items

2016-2017 Committee Efforts
The Committee collaborated with the AFWA Climate Change Committee to develop a National Conservation Needs proposal for the Multistate Conservation Needs Program. The proposal would facilitate the delivery of climate change adaptation training to state fish and wildlife agency staff and support the ability of staff to attend trainings. Very few state agencies have such training available internally and many states have expressed an interest in increased access
to training programs. This training would increase the ability of agencies to plan for and implement conservation action in response to climate change – one of the greatest challenges to conserving fish and wildlife resources going forward. Unfortunately, the proposal was not funded. There are plans to re-submit the proposal next year.

In 2015, the Committee identified four regional climate change research priorities with regards to fish, wildlife, and habitats in the Midwest. The Northeast Climate Science Center (NECSC) is developing a new project to address one of those priorities. The project will synthesize information on current and projected impacts of climate change on white-tailed deer and moose in the Midwest and develop management recommendations. During our April meeting, NECSC staff presented an outline of the project and received input from the Committee on additional items to consider. NECSC hopes to have the project complete within a year.

The Committee hosted a webinar in which The Nature Conservancy staff discussed their Conserving Nature’s Stage project for the Midwest and Great Plains. The goal of this project is to use GIS analyses to identify climate change resilient sites and identify connectivity between the sites to facilitate long distance species movement in response to climate change. The project, which is at the midway point, covers all or portions of 12 of the MAFWA states. The results of the project will be valuable for helping to prioritize conservation efforts in the states, particularly State Wildlife Action Plan (SWAP) implementation. The SWAP coordinators of the 12 states were invited to participate in the webinar. The results of the analysis, including GIS data layers, will be available to states to use in their conservation planning.

Federal Budget
In response to a request for comments about federal budget priorities, the Committee supports an increase in funding for the following:

- U.S. Fish and Wildlife, State and Tribal Wildlife Grants (STWG). This program has funded proactive conservation for declining species including research and monitoring projects, land acquisition, and habitat improvement. This program has been used to develop climate change vulnerability assessments for fish and wildlife species and integrate climate change information into State Wildlife Actions Plans. The Recovering America’s Wildlife Act, which would supplant the STWG program, is pending before Congress. However, until this is signed into law, it is important to continue and increase support for the STWG program.

- U.S. Fish and Wildlife Service, Science Support (including LCC’s). This program has produced information (e.g. vulnerability assessments) and partnerships (e.g. aquatic restoration, forest management) to assist managers in responding to climate change.

- U.S. Geological Survey, National Climate Change and Wildlife Science Center; Department of Interior Climate Science Centers. See Director action item letter of support.

Coordination
The rotation of the Committee chair normally aligns with the host state of the Directors’ meeting, which would be North Dakota next year. However, North Dakota does not have an active
representative on the Committee. Pete Jacobson, MN, has volunteered to chair the Committee for the 2017-2018 year.

**Time and Place of the Next Meeting**
In 2017-2018, the Committee will meet quarterly by conference call.

**Appendix 1. Meeting Attendance**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Illinois</td>
<td>Ann Marie Holtrop</td>
<td>Department of Natural Resources</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indiana</td>
<td>Brad Feaster</td>
<td>Department of Natural Resources</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Iowa</td>
<td>Katy Reeder</td>
<td>Department of Natural Resources</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Kansas</td>
<td>Vacant</td>
<td>Department of Wildlife, Parks, and Tourism</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kentucky</td>
<td>Vacant</td>
<td>Department of Fish and Wildlife Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michigan</td>
<td>Chris Hoving</td>
<td>Department of Natural Resources</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Minnesota</td>
<td>Pete Jacobson</td>
<td>Department of Natural Resources</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Olivia LeDee</td>
<td>Department of Natural Resources</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Missouri</td>
<td>Audrey Beres</td>
<td>Department of Conservation</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Janet Sternberg</td>
<td>Department of Conservation</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Nebraska</td>
<td>Rick Schneider</td>
<td>Game and Parks Commission</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>North Dakota</td>
<td>Terry Steinwand</td>
<td>Game and Fish Department</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td>Nathan Stricker</td>
<td>Department of Natural Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Dakota</td>
<td>Eileen Dowd-Stukel</td>
<td>Game, Fish and Parks</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Tara Bergeson</td>
<td>Department of Natural Resources</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Appendix 2. Organizational Guidelines**

**ORGANIZATIONAL GUIDELINES FOR THE MIDWEST ASSOCIATION OF FISH AND WILDLIFE AGENCIES CLIMATE CHANGE TECHNICAL WORKING COMMITTEE**

*Mission:* Advance wildlife and fish conservation in the member states of the Midwest Association of Fish and Wildlife Agencies (MAFWA) by providing a forum to facilitate sharing of climate change adaptation information, strategies, and resources, activity that will result in coordinated fish and wildlife adaptation planning actions and recommendations to MAFWA from the member states.
Objectives:

1. Provide a forum for the discussion of how fish and wildlife agencies are addressing climate change in member states, including how agency staff view the role climate change plays in conservation, and how climate considerations are integrated into agency organizational structure, policy, and planning efforts.

2. Define common priorities, develop coordinated strategies, and seek multi-state grants to address climate change threats to fish and wildlife and their habitats in member states (as identified in their climate adaptation plans, if such plans exist).

3. Stimulate an exchange of information among member states on legislation, administrative rules, adaptation and mitigation activity, education, funding and research related to climate change and fish, wildlife, and habitat.

4. Ensure coordination and cooperation among member states and federal agencies in dealing with programs to address the likely impacts of climate change.

5. Work closely with the Association of Fish and Wildlife Agencies’ Climate Change Committee, the Landscape Conservation Cooperatives, and other regional committees, institutions, organizations and groups working to address climate change.

6. Stay up-to-date on climate change issues that impact fish and wildlife and inform/advise the Midwest Association of Wildlife Agency directors on pertinent issues and solutions.

Membership: The membership of the MAFWA Climate Change Technical Working Committee (MAFWA CCC) is open to employees of member states and provinces. Member states will be allowed one vote each, regardless of delegation size. Representatives of federal agencies, research institutions, conservation organizations, and other individuals may be invited to attend Working Group meetings.

Officers: The MAFWA Executive Committee shall appoint a Chair each year. The Chair shall be an employee of a member state agency. The Chair and his/her member agency shall provide clerical support needed for conducting committee business and shall maintain a file of all minutes of committee meetings, correspondence and other items as necessary. The Chair’s responsibility shall include, but not be limited to, organizing a minimum of one MAFWA CCC meeting per year, maintaining committee files, preparing necessary correspondence and preparing a report of all CCC activities for submission to the MAFWA Executive Committee. The MAFWA Executive Committee shall appoint a Vice-Chair. The duties of the Vice-Chair will be to assist the Chair as required, assume the duties of the Chair in the event that the Chair is unable to perform those duties, and to succeed the chair when her/his term is over.

Sub-Committees: Ad-hoc Sub-Committees may be appointed by the Chair to investigate and report on specific issues. Sub-Committees will be appointed by the Chair upon review of requests from members of the Executive Committee for specific Committee action.

Meetings: The MAFWA CCC will meet at least once per year. The meeting may be held in any member state or in conjunction with other regional or national meetings that are timely or to
reduce travel costs, or be conducted by conference call or webinar. The schedule and duration of each meeting will be determined by the Chair after consultation with other members of the Working Group. Notice of meeting dates and locations will be made available to members far enough in advance to enable them to secure out-of-state travel authorization for attendance.

**Meeting Agenda:** The program will be organized to permit adequate time for discussion of agenda items. Each Working Group meeting should include a short (10-minute) report from each state on the status of climate change-related projects in that state. Other topics on the agenda will reflect current issues related to the relationship between climate change, fish and wildlife, and habitat, as well as progress toward meeting the objectives of the Working Group. The Chair may request special reports from states and individuals on current topics. State and special reports will also be submitted in written format to facilitate sharing them with agency directors, maintenance of proper files and provision of reports to other appropriate persons. Guest speakers may be invited to Working Group meetings to make presentations on topics of interest. Short field trips may be arranged in conjunction with the meetings.

**Attendance:** To enhance an atmosphere of participation and exchange of ideas, attendance from all member states and provinces is strongly encouraged.

**Business Meeting:** A formal MAFWA CCC business meeting will be held in conjunction with any Working Group meeting. The business meeting will discuss and determine specific recommendations to the MAFWA Executive Committee. Recommendations to the Executive Committee must represent the majority view of member states/provinces. Each member state with a representative in attendance will be allowed one vote. Invited agencies, private citizens, NGOs and others in attendance are not eligible to vote.

**Report:** Following any MAFWA CCC meeting, the Chair will prepare a report for the Executive Committee of the MAFWA. The Chair will also send a copy of the report to all members of the Working Group. MAFWA CCC members should brief their own administration immediately following the Working Group meeting. The report shall contain a summary of the information presented at the Working Group meeting, items covered in the business meeting, any recommendations from the Working Group, appropriate handouts obtained at the meeting and names and address of all attendees. This report shall be submitted to the Executive Committee not less than 30 days before the MAFWA Directors Annual Meeting.
June 15, 2017

The Honorable Ryan Zinke
Secretary of Interior
U.S. Department of Interior
1849 C Street, N.W.
Washington, DC 20240

Dear Mr. Secretary,

The Midwest Association of Fish and Wildlife Agencies (MAFWA) was formed in 1934 to provide a common forum for state and provincial fish and wildlife agencies to share ideas, information, pool resources, advocates state’s rights in fish and wildlife issues, and to form action initiatives to better the management and conservation of fish and wildlife resources in the Midwest. Currently, MAFWA represents 13 state and 3 provincial Midwest fish and wildlife agencies.

These thirteen state fish and wildlife agencies located in the Midwest have statutory authority for management of fish, wildlife, and their habitats within their respective states. Our ability to sustainably manage the public trust resources is already (and will increasingly be) influenced by climate change. In the past decade, the United States Geological Survey (USGS) National Climate Change and Wildlife Science Center (NCCWSC) and regional Climate Science Centers (CSCs) have provided critical science to help managers of the country’s fish and wildlife resources respond to climate change. We are writing to express our support for the work of the USGS NCCWSC and CSCs, and our hope that going forward, these centers will receive sufficient funding and support to carry out their meaningful work.

In 2011, the Department of Interior established the North Central Climate Science Center, which covers MAFWA member states North Dakota, South Dakota, Nebraska, and Kansas in addition to other states in the Great Plains and Rockies. In 2012, the Northeast Climate Science Center followed. The scope of this CSC covers MAFWA member states Michigan, Ohio, Indiana, Kentucky, Illinois, Missouri, Iowa, Wisconsin and Minnesota, in addition to New England states. These regional CSCs have added much-needed climate science capacity that individual states lack. We especially appreciate the focus that they have put on collaboration between researchers and natural resource managers. Their ability to communicate science-based results that are relevant to on-the-ground management is much more effective at facilitating wise and adaptive resource
management than the scattershot approach that was in place prior to the establishment of the NCCWSC and CSCs.

Since their establishment, the NCCSC and NECSCS have completed 25 projects and have another 33 in progress. These projects are developed in partnership with natural resource managers and are specifically designed to answer questions that natural resource managers have identified as key uncertainties that hinder management of economically and culturally valuable fish and wildlife resources.

In 2016, there was a proposal to create a new Midwest CSC by splitting the Northeast CSC region, which presently encompasses all or part of 22 states. The issues affecting Delaware and Minnesota are sufficiently different to justify distinct regional approaches. **We strongly support fully funding a Midwest CSC covering the region comprising Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, and Kentucky** to focus more directly on issues of importance to our region. Managers have questions about the future of our prairie pothole wetlands, the important fisheries in the Great Lakes, deer and turkey in our hardwood forests, and the nearly-vanished tallgrass prairie that formerly dominated much of the region. The CSCs have been a valued partner, and we would like to see a Midwest-specific CSC join us in focusing on these worthy conservation goals.

Below, we provide just a few examples of useful projects that have already informed the work of states in the region. Thank you for your consideration of this issue. I look forward to your response.

Sincerely,

Jim Douglas
President

cc: Honorable Lisa Murkowski, Chair, Senate Subcommittee on Interior, Environment, and Related Agencies
Honorable Tom Udall, Ranking Member, Senate Subcommittee on Interior, Environment, and Related Agencies
Honorable Ken Calvert, Chairman, House Subcommittee on Interior, Environment, and Related Agencies
Honorable Betty McCollum, Ranking Member, House Subcommittee on Interior, Environment, and Related Agencies
MAFWA Board of Directors
Dr. Douglas Beard, Chief, U.S. Geological Survey National Climate Change and Wildlife Science Center
Richard Palmer, University Director, Northeast Climate Science Science Center
Examples of CSC Projects utilized by MAFWA States*:


   **Summary:** Winter conditions have changed substantially in the Great Lakes region over the last 50 years, with the region experiencing rising temperatures, declining lake ice cover, and increased lake-effect snow. These changes have direct implications for economically important wildlife, such as deer and waterfowl.

   The goal of this project is to identify how winter severity, snowpack, and lake ice could change through the mid- and late-21st century, and how species such as the white-tailed deer and mallard duck will respond. Because currently available climate data is at too coarse a scale to provide information on future conditions for the Great Lakes, researchers transformed these models from a global-scale to a regional-scale.

   Predictions of the future distribution of ducks and other wildlife in the region will help guide State Departments of Natural Resources, Ducks Unlimited, and other stakeholders in developing adaptation strategies for vulnerable species and in mitigating the potential economic losses that might result from changes in species distribution.

2. **NCCSC Project**: “Identifying Economically Effective Targets for Grassland Conservation in the Dakotas.” Principal Investigator(s): David A. Hennessy (Iowa State University), Christopher Anderson (Iowa State University), Hongli Feng (Iowa State University), Peter Wolter (Iowa State University). [View project summary here.]

   **Summary:** The conversion of grassland to cropland in the Dakotas could imperil wildlife such as nesting waterfowl and contribute to the degradation of water quality in the Mississippi River watershed. However, high crop prices in recent years have contributed to a high rate of grassland to cropland conversion on private lands. In addition to these economic factors, changes in climate could exacerbate the challenge of protecting grasslands, as conditions may become more amenable to row crop production.

   The goal of this project is to work with grassland conservation managers to better target the use of funds allocated toward incentivizing grassland preservation in the Dakotas.
Researchers have been evaluating the vulnerability of crop production to climate change, assessing the likelihood of grassland conversion to cropping, and calculating the costs of protecting grasslands under different future economic and climate scenarios.

Working with land conservation managers, researchers are using these results to identify land parcels where grassland conservation investments would be most effective. For example, researchers have developed a land conversion choice calculator that compares long-run expected returns from different land uses under alternative climate and economic scenarios. By developing tools such as the land conversion choice calculator, this project is helping to inform a critical component of grassland conservation – deciding which parcels to target for protection.


Summary: Water temperatures are warming in lakes and streams, resulting in the loss of many native fish. Given clear passage, coldwater stream fishes can take refuge upstream when larger streams become too warm. Likewise, many Midwestern lakes “thermally stratify” resulting in warmer waters on top of deeper, cooler waters. Many of these lakes are connected to threatened streams. To date, assessments of the effects of climate change on fish have mostly ignored lakes, and focused instead on streams. Because surface waters represent a network of habitats, an integrated assessment of stream and lake temperatures under climate change is necessary for decision-making.

This work is informing the preservation of lake/stream linkages, prioritization restoration strategies, and stocking efforts for sport fish. This project employs state-of-the-science methods to model historical and future thermal habitat for over ten thousand lakes in MN, WI, and MI. These data are being combined with observations of fish, stream connectivity, and stream temperature data to predict suitable fish thermal habitat. The results of this project are already being used by partners and stakeholders to prioritize adaptation and restoration strategies for the region’s freshwater resources. Additionally, these data products are being shared openly in machine-readable formats to spur other innovation and research.

*Project summaries above are adapted from content on USGS National Climate Change and Wildlife Science Center’s website: [https://nccwsc.usgs.gov](https://nccwsc.usgs.gov)*