

TO: MRRIC and its Tribal Interests Work Group

FROM: John Norder, Indigenous Knowledge panelist on the Independent Science Advisory Panel (ISAP)

RE: Outreach to MRRIC Tribes regarding how ISAP (and MRRIC) can help USACE and USFWS incorporate Tribal knowledge and concerns in implementing the Missouri River Recovery Program

DATE: April 8, 2021

Opening Recognition

Prior to beginning the substance of this report, I wanted to acknowledge and express my gratitude to both those Tribal members I was able to meet in person at the Fall Science meeting in 2019 and during the subsequent TIWG calls that have increased my understanding of the need to be a listener and learner of the TIWG members first and foremost in this role on the Independent Science Advisory Panel. I hope this report serves as a first step in that direction. I also want to acknowledge that the efforts being undertaken by MRRIC and the ISAP is being done on the historic and sovereign lands of the Missouri River basin Tribes, and I respect the rights of these Tribes as caretakers and original residents of these lands and waters and thank them, as well, for their welcome to work with them.

Introduction

This report is the outcome of two consecutive events in 2019 that were initiated by the Missouri River Recovery Implementation Committee (MRRIC) and the National Center for Environmental Conflict Resolution (NCECR) in conjunction with the Tribal Interests Working Group (TIWG) and the Independent Science Advisory Panel (ISAP). For the first, as understood by the author of this report, the TIWG had expressed concerns and a desire for greater transparency of process and inclusion of Tribal perspectives in the scientific teams' activities. This included participation in developing and implementing conservation strategies for the three federally listed vertebrate animal species within the Missouri River basin – the Pallid Sturgeon, Piping Plover, and Least Tern. This further included ensuring that the actions taken by federal agencies were properly mitigated in relation to Tribal lands, both historic and current, and the Tribal cultural and natural resources therein.

To meet these concerns, and the second event, MRRIC recommended that a new position on the ISAP be created for an Indigenous Knowledge panelist – originally conceived as an Indigenous Science panelist – who would serve as a conduit for Tribal concerns and knowledge in the periodic and annual reviews undertaken by the ISAP on MRRIC conservation initiatives under the MRRIC Strategic Adaptive Management Plan (SAMP). The appointment to the ISAP of the author, Dr. John Norder, an associate professor of Anthropology and Tribal Citizen of the Spirit Lake Sioux, was formalized in the early fall of

2019 to fill this position. Following the appointment, the author attended the 2019 Fall Science Meeting in Omaha and met with the TIWG to introduce the author and begin discussion of how the author's role on the ISAP should function. Based on this initial meeting, subsequent discussions with the Third Party Science Neutral (TPSN), Robb Turner, and NCECR Senior Program Manager, Marci DuPraw, led to the development of a draft charge for the author that was formalized in April 2020.

1. Purpose and Charge

As outlined in the final charge vetted by RESOLVE and distributed to the author, dated April 7, 2020, "time from the pool of funded Discuss and Feedback (D&F) hours [has been allocated] to ... Dr. John Norder to conduct Tribal outreach with as many MRRIC Tribes as possible. "MRRIC Tribes" refers to any Tribe that has been formally invited to be a member of MRRIC" (Tribal Outreach Charge, April 4, 2020).

Tasks outlined in the charge included the following (adapted and abbreviated from the initial document and subsequent planning):

- a) To consult with the TIWG on the process outlined in the charge and incorporate suggestions and revisions before initiating the outreach effort.
- b) To schedule and interview interested MRRIC Tribal members using the protocol reviewed and approved by the TIWG for Summer 2020.
- c) To have a progress report on outreach efforts with the TIWG
- d) Based on the August 2020 TIWG Meeting, to provide a draft report to the TIWG for review prior to submission of the final report detailing the following:
 1. the outreach process,
 2. summary of the discussions of points of concern,
 3. and recommendations for Dr. Norder in his role on the ISAP in terms of communication of information from and reporting information to MRRIC Tribal members during any review process undertaken by the ISAP.

The report is structured based on these tasks. Note that Tasks a – c were prescribed in the original charge to the author; Task d is an addition made by the author to facilitate the organization and presentation of the work.

2. Consultation with the TIWG before Summer 2020 Outreach

A consultation regarding the outreach process was incorporated into the TIWG call of May 12th, 2020. Before that time, both the draft charge and a draft of the interview protocol to be used by Dr. Norder were circulated to the TIWG in order to discuss and provide feedback on the process. The initial interview protocol was structured by the initial interpretation of what the Indigenous Knowledge panelist would do and also from feedback at the Fall 2019 Science Meeting, where the TIWG was introduced to Dr. Norder.

The consultation provided valuable feedback on the draft interview protocol and it was subsequently streamlined to a general introduction of the purpose of the interview and then the following **three core questions for those with working experience with MRRIC**:

- a) What has been your experience with MRRIC?
- b) What would you like to see in your Tribe's relationship with MRRIC?
- c) What recommendations do you have for me on the ISAP as the Indigenous Knowledge panelist?

For those who were new and had not worked with MRRIC before, the first question was changed to:

- a) What do you know about MRRIC?

In addition to feedback on the draft protocol, additional comments and suggestions were provided regarding the longer term approach to Dr. Norder's role. These will be summarized along with the information that was shared during the interviews.

3. The Outreach Process

Before detailing the outreach process, it is important to note the impact of the Covid-19 pandemic. For many Tribes, offices were closed, travel was restricted, and where feasible, work was done from home. For some individuals, work priorities and tasks were reallocated or reduced. For all of the interviews that were conducted, the pandemic's impacts were discussed either in their direct impact on work or indirectly with regard to the larger Tribal community. While it was not directly documentable, it was probable that office closures and reduced or retasked time for some individuals led to their inability to be reached to schedule an interview. As a final note, another point that was brought up by the TIWG at more than one meeting, but articulated again at the May 12th meeting, was the need for in-person contact with the MRRIC Tribal representatives on their reservation communities by Dr. Norder. Due to limited funding, Marci DuPraw of the NCECR indicated that this was not a feasible option for this process.

On June 1st, 2020, Marci DuPraw sent out an introductory email to the then current list of MRRIC Tribal contacts introducing the outreach efforts and noting that contact from Dr. Norder would occur over the course of the summer to schedule and conduct interviews with interested MRRIC Tribal representatives. Dr. Norder began this process in mid-late June and contacted the 16 primary representatives¹, and required paired contacts if noted, via e-mail and subsequent phone calls. Eight responses were received from MRRIC Tribal representatives. Of these, only four interviews were able to be scheduled during June/July with a further two delayed until August and September. The remaining two

¹ Two MRRIC representatives from the original invitation list provided to Dr. Norder changed status during the summer of 2020, but were contacted nonetheless.

representatives informed Dr. Norder they did not have time for an interview due to one or more of the circumstances described above. The original charge asked the PI (Dr. Norder) to identify those invited to be interviewed and those actually interviewed, but also said that the PI should honor any Tribe's request for confidentiality. While the original charge asked that specific MRRIC Tribal representatives be named, professional (American Anthropological Association) and federal ethical guidelines (DHHS and FDA) along with discussions during the May 12th TIWG call affirmed that confidentiality should be maintained for all interviewees. In honoring the Tribes' request for confidentiality, no individual or Tribal names or identification are provided in this report other than to note that the respondents are all MRRIC representatives. It was further affirmed that any information that was shared during interviews that MRRIC Tribal representatives considered off-the-record is also not included in this report.

During the interviews, which lasted from 30 to 60 minutes, the protocol approved by the TIWG was used to structure the conversations as open-ended rather than directed question and answer. While the initial preference for the outreach effort by Dr. Norder was to determine how best to bring Indigenous Knowledge into the Adaptive Management process undertaken by the science teams and put into practice by the partner federal agencies, the reality of ten years of engagement with the Tribes by MRRIC needed to be put into context first. As noted in the 2013 MRRIC Tribal Benefits Factsheet, one of the stated benefits was to 'Provide a holistic Tribal viewpoint' as part of their participation in MRRIC. This has become a more common practice with federal agency/Tribal working partnerships – although generally articulated in more specific terms in these other endeavors – and MRRIC's renewed commitment to this type of engagement required taking a step back to review what has or has not been accomplished in the past and, subsequently, what steps forward can be made.

4. August 2020 Progress Report

At the August 21st meeting of the TIWG, time was provided for Dr. Norder to give an initial progress report on the outreach efforts completed over the course of the summer. The full details of the progress report will not be presented in this section as they form the corpus of the draft report. However, one point that was made during the meeting was that the report would be submitted as a draft to the TIWG for review at which point revisions could be made by partners who were interviewed if they chose to do so, and suggestions provided by the TIWG to improve the communicability of the document for MRRIC as a whole. Subsequent to any revisions suggested by the TIWG, the report, as a product of the ISAP, would then be formally communicated to MRRIC.

5. Draft Findings of the Outreach Effort

While only six full interviews were conducted, this response constituted more than a third of the 16 active Tribal representatives in MRRIC. Standard scientific sampling in the social sciences would consider this to be a 'representative' sample; however, this conclusion does NOT apply when working with Tribes. Regardless of outside observational similarities in

language, culture, political structure, community cohesion and wellbeing, and social and economic measures, each Tribe is unique in all of these aspects. As a result, the six interviews cannot be considered to constitute the entirety of the perspectives of the other active MRRIC Tribal representatives or those other Missouri River basin Tribes who are not active in MRRIC. It is hoped that the TIWG will find commonalities with the perspectives, opinions and suggestions made by those interviewed and subsequently add to or refine them in order to, as noted above, provide a document productive towards moving Tribal engagement in MRRIC forward in substantive ways that are mutually beneficial.

Before providing the findings and following on the above, it is important to note that the diversity of Tribal perspectives was also shaped by the diversity of MRRIC Tribal representation in terms of their Tribal roles/positions. The majority of MRRIC Tribal representatives hold positions in one of three areas: cultural or heritage management (typically Tribal Historic Preservation Offices (THPO)), natural resource management, which may be focused on multiple (e.g. floral, faunal, and/or mineral management) or single (e.g. water quality) resources, or tribal governance (e.g. tribal council or administration). Some representatives may have positions in or oversight over one or more of these areas, and some of these areas are not mutually exclusive from the others depending on the Tribe. As a result, and this was observed by Dr. Norder at the Fall Science Meeting in 2019, representatives expressed concerns and priorities that were of significance to their specific Tribal circumstances. This will be addressed further as part of the concluding recommendations.

A final point to make in this report is that the TIWG representatives are not referred to as either 'stakeholders' or a 'special interest group'. As members of sovereign nations within the boundaries of the United States, their engagements with federal agencies are often prescribed by treaty agreements and federal policy. As such, they have a unique position within MRRIC that allows for and, in some cases, requires different forms of engagement with the partnered federal agencies than with stakeholders in the Human Considerations Working Group. This point arose in some of the interviews outlined below.

The remainder of this section will be structured around responses to the three interview questions. In addition, and where useful, further information will be used from the TIWG meetings that Dr. Norder attended to provide additional points of concern or clarification.

- a) INTERVIEW QUESTION 1: What has been your experience working with MRRIC? What do you know about MRRIC?

Of the six Tribal representatives interviewed, the majority had experience working with MRRIC for at least 2 or more years. Of these all had been on TIWG calls at one point or another, but not all had been able to attend a MRRIC meeting in-person. This latter was due to a concern that has already been outlined in the July 23rd, 2011, memo *Plan for Addressing Obstacles to Participation in MRRIC* submitted by the then Subcommittee on Tribal Participation. This point will not be addressed

here, as MRRIC Chairperson Gail Bingham has continued to work on this issue with the partnering federal agencies and other funding partners.

What has been your experience working with MRRIC?

Those Tribal representatives with experience generally described working with MRRIC as being frustrating to a certain degree due to several factors. However, it should be noted that none of the representatives stated that they believed that the work of MRRIC had no value, and several stated that they saw Tribal participation as critical in informing the actions taken by the partnering federal agencies based on MRRIC's recommendations. These representatives further appreciated the perspectives and opportunities to engage with MRRIC stakeholders in discussions of mutual concern when they arose.

Over the history of MRRIC, the partners interviewed all had one comment in common, which was a general lack of responsiveness to the expressed concerns of the TIWG over the years. The concerns varied, but those interviewed believed it established a set of low expectations for how Tribal input was valued by the partnering federal agencies with the exception of a few noted individuals within federal agencies and MRRIC.

Specific examples provided by partners interviewed included:

- 1) The work of two representatives in producing a working document that outlined a process of Tribal engagement within MRRIC. The document was submitted to MRRIC; however, no action was taken, and they do not know what became of the document.
- 2) Recognition of the Dakota Access pipeline issue in the work of MRRIC and the apparent complacency of the USACE. This was particularly salient to the partner interviewed, as outside of MRRIC, the USACE has responsibilities for consultation and mitigation outlined in the Programmatic Agreement (PA) of 2004 and the revised PA of 2018 on the mitigation of impacts on cultural resources in the Missouri River. The partner interviewed outlined how these PA's are a component of MRRIC Tribal engagement requirements and in the case of the Dakota Access pipeline issue, the USACE neglected its responsibilities to MRRIC Tribal partners with the destruction of numerous Traditional Cultural Properties (TCP) that fell within USACE jurisdiction.
- 3) Following on point 2, the issue of Cultural Resource Management was discussed extensively by one partner interviewed in regard to the building of the Garrison and Gavins Point Dams and its subsequent submerging of the river bottom lands of the Mandan, Hidatsa and Arikara and the Cheyenne River and Standing Rock Sioux tribes. This partner outlined that the USACE has historically engaged in construction works and activities under the Master Plan that have involved little to no concern over the historical and long-term impacts on Tribal lands, particular burial sites and other TCP's. This partner also outlined that in the

MRRIC working environment, shoreline degradation of the artificial lakes on what was once upland burials sites and other cultural sites was a point of concern regarding the planned water releases meant to test impacts on the sturgeon and why consultation had not been undertaken. Consultation will be discussed further.

- 4) Prioritizing species-specific concerns over larger habitat and environmental issues. This was a common concern for those who worked in Tribal natural resource management and included TIWG members working in governance. For those in natural resource management, the issue was contrary to their Tribal perspective in that they recognized the importance of protecting the water, the finned, and the winged on the Missouri River. The species-specific approach and the limited habitat recognition was viewed as a significant challenge to participation in MRRIC, but as noted above, they believed that Tribal participation remained crucial in informing the process. In conjunction with TIWG representatives in Tribal governance, the concerns, particularly in the artificial lake systems, resulted from continued erosion of shorelines due to flooding events and the maintenance of access to water and protecting water quality. This was echoed by participants in the upper and lower parts of the basin both in interviews and in TIWG meetings that Dr. Norder attended.
- 5) A final point brought up by those with longer term experience with MRRIC was the perceived 'bait and switch' of MRERP. Both in partner interviews and TIWG meetings, MRERP and its original charge for 'whole river' recovery was brought up and noted as a failure by the federal agencies in meeting the obligations that ensured the security of treaties and recognition of the sovereign rights of the Tribes. While all of those interviewed understood why MRRIC was a compromise that had to be done to achieve a starting point for the general MRERP process, the lack of movement or efforts to expand the process to be more inclusive of the 'whole river' is embedded solidly in the MRRIC Tribes' oral history and continued participation in MRRIC.

What do you know about MRRIC?

Those interviewed who had not worked with MRRIC before had a solid understanding of the basics of MRRIC's efforts, but were new to the annual cycle of events and meetings. They did not have much to comment on in this area, but they were seasoned in working with federal agencies, in general, and expressed several concerns about what their involvement would likely be in MRRIC that are worth noting here.

- 1) Expectations are low. The partners new to MRRIC expressed general cynicism about the responsiveness of MRRIC and particularly the federal agencies. As one person noted, when consultation has occurred with their Tribe, it is after the federal agencies have made decisions. Tribal inclusion is more an informational session describing the action that will be taken rather than an opportunity to shape the process.

2) Science vs. culture is not a real thing. On this point, one of the partners interviewed – and this was echoed by a couple of other representatives who had worked with MRRIC for a number of years - scientists need to see the larger value of their work as an integral aspect of the culture. The idea of Indigenous science was also problematic for them, as the concept of science remains a concept of western thought and not Indigenous. For this person, the work is collaborative, and knowledge is shared for the betterment of the endeavor being undertaken. As another partner interviewed stated, to think of this fish as alone being isolated from the world is to deny its relationships to us as humans and the other finned, winged, four-legged, and rooted, which is a narrow way of saving it.

b) INTERVIEW QUESTION 2: What would you like to see in your Tribe's relationship with MRRIC?

Responses to this question by the MRRIC Tribal partners interviewed mostly revolved around redressing the problematic issues of their past experience with MRRIC and their engagements with federal agencies more generally as outlined in the responses to the first interview question. As with responses to the first question, no one interviewed believed that working with MRRIC or the federal agencies was a losing proposition in the long run. As in other parts of the country, federal agencies have increased their commitments to more proactive forms of Tribal engagement. This has led to several positive hybrid programs, often framed as co-management in conservation work, that incorporate Tribal knowledge and teachings in species conservation, forestry, and water management. However, as the author notes, the United States is still at an emergent phase in more inclusive engagements with Tribes regarding natural and cultural resource management compared to other countries, such as Canada and Australia.

In general, this question's responses fell into four general categories: consultation, participation, accountability, and education or information sharing opportunities.

1) Consultation: consultation has been a complicated process in almost every American Indian and cultural and natural resource piece of legislation. It is often nebulously phrased as to when it should occur in a process, whether it is advisory, meant to serve as a means of generating consensus or compromise between parties, or, as noted above, simply a notice of intent to affected parties.

For those MRRIC Tribal partners interviewed with experience with MRRIC or not, the consultation process was one with a great deal of variability in terms of how it should be conducted. One partner explained that their Tribe had a formal process defined and codified in tribal regulations, and any engagements with federal agencies whether under the National Historic Preservation Act (NHPA), the National Environmental Protection Act (NEPA), or Executive Order 13175 were prescribed by this process. Another partner explained that consultation

- was defined by the Tribal Council, but was subject to change when Tribal Council flipped during an election cycle. As a result, the process could be more or less formal depending on Tribal Council priorities. For a third partner, consultation was delegated to them to conduct based on their area of expertise – in this case, it was for NEPA-related work.
- 2) **Participation:** In conjunction with consultation is participation of Tribes in actions that would impact their lands, livelihoods, etc., from the beginning. As noted above, consultation has been observed to occur after an action had begun or plan was made or implemented. As sovereign nations, participation is similar to the process of treaty-making, where all parties are brought together to initiate an agreement to achieve a common goal PRIOR to taking action. As one partner interviewed noted, participation from the beginning creates investment in the process and a recognition of the value of partners' contributions. They further elaborated that this was particularly important when work was being undertaken on their traditional lands whether on or off the reservation. Another MRRIC representative echoed this observation at a TIWG meeting where seeing an IRC's functioning on the river would allow for greater understanding of the changes to the river that resulted from this construction and how their knowledge could subsequently be provided in considering other IRC construction.
 - 3) **Accountability:** Building on the previous two issues, accountability is significantly different for MRRIC Tribal representatives than for the stakeholders. This arises from their unique federal relationship as sovereign nations whose engagements are prescribed, as noted above. Only a couple of partner interviews addressed this point, but it was also brought up in the context of more than one TIWG meeting. There is some confusion on the issue of accountability and who is accountable on federal actions and works undertaken as part of MRRIC. Given multi-agency involvement and MRRIC and the science teams' operation, one of the partners interviewed was unsure how issues of concern were communicated to USACE, as the primary agency, or USFWS on construction projects or conservation actions or scientific studies. Another had a similar concern: they felt that TIWG meetings with only TIWG members in attendance were a form of siloing, which they were very familiar with from how Tribal units on a reservation often functioned. In this situation, partners did not know how or to what effect their discussions were having, except in cases where a non-TIWG member attended.
 - 4) **Education and Information Sharing:** Building again on points one and two and the problem highlighted in three regarding accountability, several of the partners interviewed and echoed by Tribal representatives in TIWG meetings, Tribes want to understand the science of what is being undertaken. In some ways, this is perhaps the biggest hurdle that the Tribal representatives are trying to address in their presence in MRRIC. During several meetings, one of the Tribal representatives regularly brought up providing funding for educational workshops. One workshop had been provided in the past and several of the TIWG members who had attended it spoke of its value to them.

The expectation of Tribal sharing of Indigenous knowledge does not have a context in which to do so without a functional understanding of the knowledge currency currently being circulated by the Science teams to MRRIC as a whole. Another partner interviewed said that knowledge sharing and understanding is a two way street that has already been attempted. Indigenous knowledge has been provided to MRRIC at multiple times in multiple ways, yet it has not been understood and received in the manner given. As one TIWG Tribal representative put it at one meeting, 'we've been giving you this information for years, but you haven't listened'. A final partner interviewed provided the profound observation that people need to understand that a change in the (Missouri) River is a change to the people (Tribes). Without understanding that, they (federal agencies) will never truly understand the impacts of even small actions they take on the river. They need to talk to us [the Tribes] first.

- c) What recommendations do you have for me on the ISAP as the Indigenous Knowledge panelist?

This was perhaps, the most challenging question for people interviewed. Besides some friendly and humorous 'good lucks' from MRRIC Tribal members at meetings and at the end of interviews, there was still a sense of 'what role does this individual have?' From the beginning at the Fall Science Meeting, a couple of TIWG members questioned why did they (MRRIC) want their Indigenous Knowledge? This is a valid question for a variety of reasons.

While Indigenous Knowledge has become a fad in academic circles and among conservation and environmental policy-makers, applied researchers and NGO's for the past two decades, the benefit of using Indigenous Knowledge has been arguably uneven and questionably unethical in some instances. Among conservation and environmental circles, the Indigenous Knowledge with the greatest value is 'environmental knowledge', which has been viewed as having the most utility by the scientific community. There is an even longer history about the suspicions of the motives of researchers working with Tribal peoples that involves the author's own discipline of Anthropology, but that is outside the scope of this report. Suffice it to say that approaches that researchers would normally consider reasonable are viewed differently and sometimes hostilely by Tribes. For example, one TIWG member in commenting on the author's initial draft of the interview protocol commented that it looked like an outline for a publication to advance the author's career. However, given the interest of the TIWG to have a voice on the ISAP, caution remains, but there is also the recognition for advancing the TIWG's concerns and perspectives in MRRIC through the ISAP process.

Based on the interviews and suggestions from TIWG Tribal representatives at the Fall Science Meeting and on TIWG calls, the main recommendations for Dr. Norder's role on the ISAP is four-fold:

- 1) to be a conduit for the concerns of the TIWG Tribal representatives during any review process regarding MRRIC-related actions being proposed by federal agencies.
- 2) to ensure that Tribes are substantively a part of any document reviewed by the ISAP, and if not, to consult with TIWG Tribal representatives to ensure substantive inclusion.
- 3) to work with relevant Science team members on producing readable documents that TIWG Tribal representatives can understand, which may include presentations to the TIWG.
- 4) to continue outreach efforts on a regular basis with individual Tribal representatives, and when feasible, travel to meet with them in-person on their reservations to continue to learn and listen.

5) Closing Recommendations

To close this report, the author would provide some key points for consideration moving forward with the Indigenous Knowledge panelist position and also Tribal engagement, more generally.

First, while the position is titled the Indigenous Knowledge panelist, it is more appropriate to be referred to as the Indigenous Knowledges panelist. Serving as a conduit and 'translator' for lack of a better word for multiple Tribal representatives is to recognize that these are different constituents that the panelist is serving and their knowledges are unique to each community. So, Indigenous Knowledges.

Second, siloing of the TIWG is problematic. However, folding them into the Human Considerations group would be an incorrect solution. While the author has immense respect for the work that the RESOLVE teams do at meetings and on calls, their work with Tribes in consultation with the TIWG and MRRIC leadership needs to have a greater eye on how the TIWG can articulate more clearly within the larger work of MRRIC. The author has observed on more than one occasion in his short time with MRRIC that when a TIWG member is present in a multi-workgroup meeting, they are addressed and Tribal issues are recognized, if not discussed in some detail. However, when they are not present, Tribal issues are not addressed. The author refers to this as the in/visible Indian syndrome: visible when present and invisible when not, which impacts Tribal representatives' role and influence within an organization like MRRIC.

Third, secure a liaison position between MRRIC and the TIWG that is more than RESOLVE staff. Oftentimes, Chairperson Gail Bingham or someone else will regularly attend TIWG meetings, but a formal position within MRRIC should be established that is delegated and reports to the MRRIC chair and TIWG. Ideally, this person would be a Tribal member from one of Basin Tribes. The same also goes for RESOLVE and the federal agencies. For RESOLVE, there have been three people who have served as facilitators for the TIWG over an 18 month period, versus other Working Groups. For federal agencies, at the time of this writing, the author is aware that a representative from BIA regularly attends, and a USFWS

representative also regularly attends. USACE also had a representative, who walked on, and a replacement is currently being searched.

Fourth, key individuals from each of the Science teams should have a rotating attendance at one TIWG meeting a year to discuss a current phase of a research project and/or provide a workshop to explain the work currently being undertaken. These should be constructed as dialogues rather than lectures.

Fifth, encourage efforts at expanding the recognition of the whole ecosystems approach to working with the endangered species as a step towards the potential opportunity of the original MRERP mission. Indigenous knowledge is holistic, philosophical, spiritual, practical and scientific and should not be appropriated piecemeal to try and fit with current Science team research practices. Broken or incomplete knowledge is often considered dangerous to use by elders the author has worked with in the past. Attendance of Science team members to have dialogues with TIWG members is a step that will help this considerably.

Sixth, consultation processes should be initiated in the planning stages of any action to increase Tribal buy-in and continued participation and partnership. Consultation should also be recognized as being variable between and within Tribes. As noted above, some consultation processes change over time, so proposed federal undertakings under MRRIC should be adaptable to these considerations. Also, consultation should be cognizant of the observation that an action taken on any part of the river has relevance to all river tribes.

Seventh, for information sharing, some Tribes have developed information sharing agreements or information sharing protocols. These should be considered by both Tribes and MRRIC Science Teams as the process of asking for inclusion of Indigenous Knowledge in current and future undertakings evolves.

Finally, but not last, outreach should continue as suggested by those interviewed. Working with tribes, as certain members of MRRIC can attest is a process that takes time. Dropping someone new, regardless of being Native American or not, into the mix does not lead towards immediate acceptance or immediately productive outcomes. Retasking some ISAP activities for the 2021 year from review to outreach for the Author would be a potential option to achieve this.