NC1190 meeting minutes

July 26, 2022, 9am-noon CT

Zoom:<https://uidaho.zoom.us/j/7023194867?from=addon>

**Before meeting: Fill in google forms (by Friday, July 22nd) and read last year’s minutes and the 5-year approved proposal**

Form includes:

· Secretary and vice-chair volunteers

· 3 projects related to NC-1190 theme

· Other annual report needs, final due 9/26/2022

Spreadsheet with responses for annual report: <https://docs.google.com/spreadsheets/d/1cttuH0rfW0NOh_iY91KQpfGL5S_1z_nqZQLo94eCnUE/edit#gid=0>

**Introductions/updates**

· Welcome & zoom ground rules. Assign a timekeeper.

· CALL TO ACTION!: Elect TWO new officers (need both a new secretary and a new vice-chair, Chloe will be our chair)

***DECISION:***

***Kristin will be Secretary this year for the 2022 report and the Vice Chair & host Chicago in 2023.***

***Sarah Church will start as the Secretary in 2023 and then host maybe in Montana in 2024.***

***Anil is willing to start as Secretary in 2024.***

**Discussion about group** (could also happen at the end, depending on group input)

o How to diversify?

o Energy and commitment of current members

Notes:

Seeking diversification in our membership and in our research. Progress in expanding the voices and narratives around water in our research. We haven’t realized our aspirations about diversifying our membership. How have we diversified?

Who is welcome in NC1190? Initial inception was land grant university focus, but that was too limiting. The land grant representative receives funds for travel, but there aren’t restrictions or privileges beyond that. Expanding beyond north central region. Social science focused group. Practitioners who do science and are interested in learning more about social sciences are more than welcome. Students bring energy.

Virginia experience around inclusive interpretive research design; $ to pay researchers; BIPOC professionals are overwhelmed with requests. Not fair to ask people to overparticipate. What do we offer? Publications. Forests and water; land use, water quality and water quantity.

***Action items:***

Adam Wilke will look into whether USDA can help us fund the diversification of NC1190, including one specific mechanism of allowing folks to donate their travel funds.

Seek other ideas for funding: maybe UMN Jeff could find funds?

More regular opportunities throughout the year for people to talk.

Invite new people to in-person meetings

Intercultural learning and training to overcome our own biases. Midwestern rural work. Discussion where that’s the topic and we can share some of our struggles and where we are coming from. Ensure we are a welcoming environment when we do invite people in.

Guidance document: <https://www.ncra-saes.org/_files/ugd/4081a5_baf8c39b33ea4503a902d5235ff2dc09.pdf> - key point: From Adam's document: "Membership to multistate research activities (but not access to formula funding) is open to all SAES scientists, Extension educators, and others who are in a position to contribute to that activity. This should be seen as encouragement to committees to reach out to others when organizing an activity, recognizing that the multistate research authority is a unique and powerful organizing principle."

Ideas from chat:

* Our strength is focusing on the social sciences
* Want to focus on recruiting practitioners for next year - perhaps with the help of NCWRN
* Organize regular presentations on water and social science and invite different sorts of people to present

Note from Adam Wilke: available for questions and help for our multi-state group! Also available to talk about grant proposal opportunities

Maybe we need to have another focus, too, to learn from what practitioners are facing and how we can support their work. That is in line with the Advancing engagement project, which as a component on researcher - practitioner relationships.

**State reports**

· Each state will give a 3-minute oral highlights reel of their NC1190 related work (they can assume everyone has read the more detailed version which will be emailed out)

Attendees:

**MN** Mae Davenport (UMN) Partnering with GLIFWC and Estuarine Research Reserve on tribal sovereignty, prioritizing Menomen as a sacred relative. Many native and nonnative students. NSF CNH and NOAA adaptation sciences program. Engaging and collaborative work.

**ID/IL** Chloe Wardropper (UIUC, formerly UIdaho) 2 students doing toxics in water quality, papers in or near review. Co-led a special issues in J of Hydrology on water decision support tools. Hoping for more social science papers but it’s more hydro and decision support tool papers. New projects: NIFA recently funded transferring to Illinois, Kansas with a hydrologist. Understanding how farmers and state water office staff perceive and use models of groundwater-surface water flow and availability. Mental models of how people perceive the models. Climate smart ag proposals. Using her startup and collaborating on Environmental Defense Fund grant looking at the institutional picture, database of programs for soil carbon sequestration for farmers to create the credits to sell in markets. Interested in connections to water quality and quantity.

**IL** Kristin Floress (USFS) - collaborating with many others on projects already listed.

**WI** Joe Bonnell (UW Extension) Farmer led watershed groups - who is effective and how do we define effectiveness? Getting practices on the ground and attracting new members. NCRWN: recent conference on climate intersections with water and water resource issues. Anne Nardi pulled it together, integrated indigenous communities. Successful conference for diversifying participation and giving voices to people we have not often heard from.

**PA** Anil Kumar Chaudhary (Penn State) Also part of USDA NIFA project Wes mentioned and the guidebook on stakeholder engagement. Graduate student working on a grant from Northeast SARE, tail end of data collection. 3 part project: interviews with producers and their participants and motivations for EQIP and other conservation groups. 2- conservation policy and governance at national, state and local levels. Group leaders at national and local level to find out how engagement influences $ getting implemented on the ground. Interviews with conservation professionals locally for policy driven by national Farm Bill. Outreach: how professionals can talk with producers about EQIP and other policies. SAS project on urban agriculture, scenarios and futures; colearning with stakeholders; 5 scenarios. Power dynamics, including marginalized stakeholders. Conceptual framework for movement from one-way to two-way information. Drinking water in the Lancaster area; build trust process. Found a community willing to work with them in a community based approach. Listening. FEW Nexus concepts. Multi-university graduate course. Sustainable agriculture in urban fringe.

**WI** Adena Rissman (UW-Madison) - NSF INFEWS: Have a review paper assessing historic drivers of water quality problems in Midwest. PhD student Yu Lu is leading a survey related to food-energy-water-ecosystems questions. Grassland 2.0 (USDA CAP): assessing social dynamics of livestock grazing. Grad students have led Just Transitions workshops related to grasslands. Sea Grant project: in East-Central WI with high livestock production. Have collaborated with farmer-led watershed groups. NIFA project: focusing on new landowners and conservation. Teaching: policy and politics of environmental information - related to water. And collaboration with Tribal Colleges.

**PA** Wes Eaton (U Wyoming, formerly Penn State) - Mark and Wes wrapped up Water for Ag. Guidebook for stakeholder engagement in natural resource, tools and strategies. Conceptual framework paper published in Society and Natural Resources. Farmer perspectives on collaboration <https://sites.psu.edu/engagementguide/> Expressing a willingness to learn vs the need for education of others. Job search. Elated to keep those projects moving forward now that he’s found a position at Wyoming. USDA conference grant for Advancing Engagement. Virtual with COVID. <https://scholarsphere.psu.edu/resources/d6066f7e-045c-41f7-af69-9cc15e1e81f3>

Writeshop series. Special issue collection starting to get through peer review process with Socio-Ecological Reserach PRactice. Connecting to INFEWS Engagement group. Moving to Wyoming!

**MI** Stephen Gasteyer (Michigan State) - Septic and rural ; Native and allies in Great Lakes on water quality protection and challenges from mining and septic and drainage and sanitation. 3 agricultural: farmer led agricultural groups, work with young and women farmers and conservation; certified crop advisors and conservation; drainage and tile monitoring; involved with other folks on governance of file trainings which is expanding dramatically across the Great Lakes and has a governance mosaic from local to state.

**IA** J. Arbuckle (Iowa State) Iowa Rural Life Poll questions on water quality. 4R plus practices perspectives and efficacy. Conservation practitioner poll - survey of practitioners, soil and water conservation society, Katherine? SWCS to develop a survey of conservation practitioners with NRCS, state agencies, pheasants forever wildlife biologists to get their perspective on what is working and not working? What are their challenges and what is working well or not. https://www.swcs.org/resources/publications/2021-conservation-practitioner-poll

**WI** Ken Genskow (UW-Madison) Duluth water conference. Kyle White in Michigan keynote, nice job and well balanced - challenges imposed by the land grant and extension system on indigenous communities. Water singer. His focus: ag and water quality; groundwater and nitrate; access to clean drinking water; BIL funding. Optimistic on investment. Climate resilience. Natural infrastructure through watershed planning and supporting work to develop state policies. Hazard mitigation planning and integration into other planning challenges. Ohio State Aaron Wilson project to improve connections between Midwest Climate Hub and extension (2 year NIFA). Back into the classroom this Fall. FAll 2023 - public engagement and conflict resolution tied to planinng. Finish sabbatical.

**IN/WI** Aaron Thompson (Purdue) - just finished survey in WI related to paying for conservation in watersheds; shoreland property owners on Lake MI; farm design/design of conservation practices - taught a course on conservation design, new publication on placing buffers, project with Kristin F on using AgBufferBuilder for implementation; Diverse Cornbelt Project - conducting focus groups currently

**NE** Mark Burbach (U Nebraska) Tonya Haigh drought mitigation center finished her PhD, is research social scientists with the drought mitigation center, farmer and rancher response to drought. Water for Ag, Ostrom based common pool resource principles; evaluated boundary spanning behavior - found many participants exhibited these skills to develop positive relationships. Nebraska water leaders academy. Presented at Purdue and brought others in to present in Nebraska.

**MT** Sarah Church (Montana State) - Working with PhD student Madison Boone on interdisciplinary project with scientists and practitioners - social learning and watershed cooperation, nitrates in drinking water, old mining activities. Finishing a few projects. Ecosystem services and wetland mitigation, surveys of aquatic systems experts on where to mitigate where wetlands are filled. Wetland and land use planning intersection. Wetlands experts are worried about biophysical services and not ranking the social and cultural services highly. Ignoring the public benefits of wetlands. Liam defending thesis on volunteer water monitoring. Understand whether and how they build trust and data and how the learning diffused outward. Program life cycle stages including chasing funding. Power dynamics between state and watersheds, trust on volunteer sites to accept what the state says. Evaluating the big sky watershed program, Americorps program in Montana. Finding that the goals of Big Sky Watershed Corps are being met for developing leaders. Project with Jessica and Anil on Chesapeake Bay, urban-farmer blame game, poster as IASNR. Both blame industry. Grant submitted on nature based water storage.

**MT** Madison Boone (Montana State)

**MN** Sarah Roth (UMN) - Also working on MN Nutrient Reduction Strategy update. Social science component with a set of social science indicators to learn about community capacity, attitudes, norms for farmers to make conservation practice changes. Doing interviews with public and private partnership groups including private industry. Considering guidance and support for those groups. Urban: MPLS-St Paul area to understand how racially and ethnically diverse residents view and use water to encourage more just water policies and programs. More mail surveys with COVID which hasn’t led to great BIPOC response rate. Hoping to survey more at community and cultural events which has been successful in the past.

Adam Wilke (NIFA)

Sharing some USDA updates --

USDA Agency Climate Adaptation Plans: https://www.usda.gov/climate-solutions/climate-adaptation-usda

USDA Strategic Plan 2022-2026: https://www.usda.gov/sites/default/files/documents/usda-fy-2022-2026-strategic-plan.pdf

Example blog post, would NC1190 like to create something like this?: https://www.nifa.usda.gov/about-nifa/impacts/multistate-project-focused-protecting-one-nations-largest-aquifers

USDA NIFA Panelist service recruitment:

https://prs.nifa.usda.gov/prs/volunteerPrep.do

**OH** Doug Jackson-Smith: resubmitting SAS CAP : build teams focused on implementing and assessing the impact of a deep on-farm engagement approach to overcome the adoption problem. Submitted a partnerships of climate smart commodities proposal focused on Ohio with farmer and on-farm led approach to collaborating with downstream market partners to develop the appropriate incentives for climate-smart agriculture. Ohio Farm Poll - released a lot of products that share those results. Pursuing USDA to redo that and build a panel. Is there interest in panel data collection in the group? Big project winding down is deglobalization of food-energy-water, participatory modeling in intensive stakeholder participation to provide feedback to the modelers to simulate alternative futures. Biggest challenge is getting modelers to listen to anything stakeholders say when the rubber met the road. Evaluative paper to say we had grand aspirations but struggled to do it in the reward systems and institutional practice. Leads AFRI crop-livestock integration, colearning with 30? Farmers on bringing livestock back into crop production. The role of livestock is increasingly interesting as a diversification strategy. Conceptual model when met in Ohio - proud of that paper.

<https://www.sciencedirect.com/science/article/pii/S0301479721020235?via%3Dihub>

He would love to see people engage this and see if it pulls us and examine the categories of drivers, dynamics and process for how to model, study, and understand conservation behavior on private lands. Working with Adena and Kristin on farmers who own woodlands, lots of forests among working farms. Led by Emily Huff at Michigan State. WI-MI-OH preliminary funding to start that work. Farmer behavioral data into SWAT models - finally coming out in publication. Tries to bring actual data on heterogeneity of farmer behavior for predicted outcomes - western lake Erie basin. She reviewed the SWAT literature for fertilizer use levels and behaviors and it’s very naive and simplistic - either all doing the same or all rationally choosing that. Break into the modeling world to figure out what the technical approach might look like for those powerful modeling actors to bring a more realistic understanding of human behavior into their models.

**Old business progress from 2021**

· Review the 5-year proposal that was approved last fall (sent out ahead of time)

Objectives for this 5-year period:

1. Empirically test the role of catalysts, structures, and agency as drivers of change in conservation behavior, resource management and governance in a water context to determine the mechanisms and conditions by which catalysts are translated into individual, collective, and institutional action.

2. Understand and develop conceptual frameworks, typologies, and analytical models of individual, institutional, and collective actions and link these to social and ecological outcomes.

3. Identify, develop and evaluate adaptive strategies to achieve desired actions and capacities to protect water resources.

4. Assess the justice, equity, and inclusion dimension of water resources management and protection.

· Other activities from the past that should be revisited (see minutes from 2021 meeting)

**Identify possible activities/focal projects to explore next year**

· Look at input from google form/other ideas for activities (activities could include writing manuscripts, organizing conference sessions/informal sharing forums, etc.)

· Vote on topics for breakout groups – goal is to brainstorm activities and next steps for 2022-23

\*\*\*\*\*Topic Suggestions (ADD YOUR NAME TO **ONE** TOPIC OF YOUR CHOICE BELOW):

*Define the topic and what it means? What can we accomplish? E.g., propose a seminar, create a working group, Roles and tasks? Leads? Folks to recruit? Review paper? Proposal?*

**TOPIC 1: Collaborative environmental governance; stakeholder and community engagement**

* 1. **Wes, Mark, Anil, Aaron, Sarah (but more #7), Madison**
  2. Researcher-practitioner relationship, science-extension interface (Wes, Anil?)
     1. Doug, Adena, Madison, Sarah, Anil, Wes

Notes:

Doug: In my own work - I focus less on environmental or watershed governance per se and more on co-learning and development of innovations in tech (as well as policy). The issues of sharing power, attention to the diversity of actors, and institutional / cultural norms and reward systems are prominent. I see these as overlapping, but distinct.

The question of 'why care' or 'what are the different outcomes' from collaborative vs. noncollaborative projects is a key empirical one we could help fill.Mark: What do people mean when they say they’re working collaboratively? Tendency for agencies’ part to have stakeholders “inform” rather than truly collaborate. Agencies say they are working collaboratively or are required to by law but not actually do it in practice.

Sarah C: Yes - defining terms

Wes: Saw issue in Chesapeake Bay region - limited to established planning and industry groups

Sarah C: Cool framework for collaboration that would be neat to look at.

Wes: tried not to narrow. Special issue papers narrowed in on that. Idea: What do good examples of collaborative governance in water contexts look like? Questions that came out of workshop: <https://scholarsphere.psu.edu/resources/d6066f7e-045c-41f7-af69-9cc15e1e81f3>

Aaron: how to know when your collaborative watershed group is not collaborative. Managers have been brought up on the language of collaboration but we’re not seeing it in practice.

LEd by Rich Margerum: <https://www.e-elgar.com/shop/usd/the-challenges-of-collaboration-in-environmental-governance-9781785360404.html>

“Smoke filled rooms” with whisky where decisions are being made and brought out to the public.

State doesn’t have continual support for resources to keep adaptive governance going.

Not so much that agencies don’t truly want to collaborate but there are so many barriers, time needed for collaborative management. They want to do collaborative management but there are practical and other reasons that become barriers to implementation.

When you’re in the position of being a convener, you have a lot to say about why people don’t show up, imagined loss of civic duty while locked into one way of collaboration happening in practice. 3 minutes at the microphone - actually the way laws are written in PA and NE leaves a lot of flexibility even though the assumption is there are standard ways for the public to participate.

Good examples and best practices for public participation.

What does falling short look like? Is it a problem?

Mid-level agency folks to determine whether they have the authority to allow the public to influence and inform policy? Tom Koontz et al. Time and position starts to shrink, promoted quickly, get frustrated and leaving. That effects ability to collaborate.

Adena: wildlife and forestry consensus based advisory groups.

Anil: the real meaning of collaborative. Everyone is trying to showcase their own agency goals.

**Next steps and lead**: **Wes** proposal in chat, what do good examples of collaborative governance in water contexts look like? Products on 6 themes. What does it look like when it’s NOT

**TOPIC 2: Climate Change– Connections between carbon sequestration and water quality**

* 1. **Leads: Aaron, Chloe, Doug, Anil, Adena**
  2. What are the synergies and tradeoffs with water and climate smart/carbon sequestration projects?
  3. How do farmers and other stakeholders perceive these synergies and tradeoffs?
  4. Doug: What lessons we’ve learned from decades of water quality research be applied to the new carbon sequestration space?
  5. How can carbon markets contribute to other ecosystem services (markets)?
  6. Aaron: Concept of whole farm/property management and carbon sequestration
  7. Who is included and who is left out of carbon sequestration projects? Are there similarities and differences with water quality projects?
  8. How do modelers represent these markets? How are the models similar and different from those of landowners and managers?
  9. Sarah C: Just transitions to energy; time consuming slow collaborative process vs the need for fast change.
  10. Adena and Doug - Distributional consequences of carbon markets - where will the jobs be? Does it shift political alliances for environmentalists and outside corporations to be aligned on storing carbon?
  11. Chloe - Historically marginalized farmers - talk to those who have active farms and may not feel comfortable participating in new markets. Best practice is to take more time to develop relationships.
  12. Aaron: what we’ve accomplished on water quality is very minimal, with many practices in teh wrong place;
  13. Douglas Jackson-Smith, In Ohio the most powerful movement on the carbon market front is persistently focused on large corn-soy farmers; despite language that
  14. Aaron Thompson, We're hearing a lot of angry farm voices related to the carbon market equity - payments for those who are subsidy hunting, rather than those who were the lead of the practice adoption
  15. Douglas Jackson-Smith, There has been so much emphasis on equity and diversity in recent AFRI calls (for the time being) - there will be a lot of projects that could serve as case studies that explore whether well meaning efforts to bring in more diverse farmers/farms on water quality/carbon seq/ecosystem service topics are effective.

**OTHER TOPICS NOT DISCUSSED**

1. Cross-state comparison of how agencies coordinate (or don't) water qual and quant. And related, local knowledge indicators for water use (like where the snow line is on a given month; but also volunteer water monitoring's impact on understanding water use triggers)
2. Discuss coordinated data collection activity (TBD)
3. Diversifying our group, EJ seminars/discussions (Mae suggestion, all expressed interest)
4. Farmer-led watershed groups (Joe, Adena expressed interest?)
5. Urban-rural fringe
6. Understanding use of and perceptions of models for water quality and quantity (and how agencies use them for management) (Chloe, Aaron, Sarah interested)