

NADP Education and Outreach Subcommittee Minutes
Fall Meeting – Hybrid Meeting, Knoxville, TN/Zoom
November 15, 2022

Co-Chair: Catherine Collins (US Fish and Wildlife Service)

Co-Chair: Chris Rogers (WSP USA)

Secretary: Katie Blaydes (Wisconsin State Laboratory of Hygiene)

Minutes transcribed from audio recording: Beck Dalton (U.S. Environmental Protection Agency)

Attendees: 42 (see list below)

Motions

- *Passed:* Motion to present proposed changes/updates of governance handbook to the Executive Committee. Kristi Morris moved, and Selma Isil seconded.
- *Passed:* Motion to present Policy for Review of Information Products to the Executive Committee with two suggested changes. Kristi Morris moved, and Mike Bell seconded.

Action Items

- **2b.** Specific proposed changes to Governance Handbook:
 - **2c.** NADP Factsheet Update
 - **2e.** NADP Learning Module request for volunteers
 - **3.** Social media updates
 - **4e.** Drafted Review of IP
 - **5a**iii. Twitter discussion
 - **5c.** Call for EOS secretary volunteer
 - **5d.** Technical and scientific committee updates for EOS
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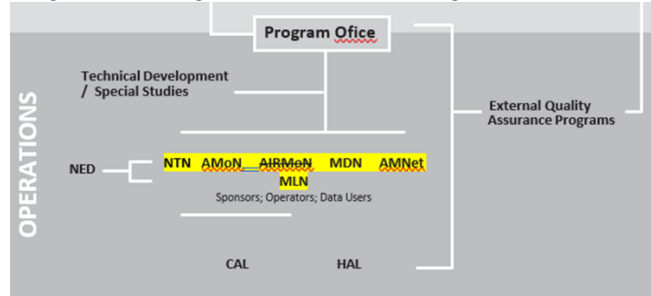
1) Introduction and logistics (Catherine Collins)

2) Old Business

- a) Spring 2022 minutes (Catherine Collins)
 - i) Katie Blaydes completed minutes for Spring 2022 minutes and posted online at <http://nadp.slh.wisc.edu/committees/minutes.aspx>. Minutes can be approved using the above link.
- b) Governance Handbook (Catherine Collins)
 - i) Last published and the Governance Handbook on November 10, 2020: <https://nadp.slh.wisc.edu/wp-content/uploads/2021/07/nadpGovernanceHandbook.pdf>
 - ii) Overview of updates
 1. Added the Mercury Litter Network (MLN)
 2. Update status of AIRMoN to “archived”
 - iii) Specific proposed changes
 1. *Page 1:* “In October 1992, the Atmospheric Integrated Research Monitoring Network (AIRMoN) joined the NADP. AIRMoN sites collected samples daily when precipitation occurred. Samples were analyzed for the same constituents as measured in NTN samples. The AIRMoN provided data for the investigation of

pollutant source/receptor relationships and the effects of emissions changes on precipitation chemistry, combining measurements with atmospheric models. The AIRMoN network was discontinued in 2019. The network data is available on the NADP website (<https://nadp.slh.wisc.edu>).”

2. Page 4: adding MLN and removing AIRMoN



3. Page 12: add MELD

Mercury in the Environment and Links to Deposition Science Committee (MELD)

The mission of the Mercury in the Environment and Links to Deposition Science Committee (MELD) is to improve the understanding of atmospherically derived mercury sources, pathways, processes, and effects on the environment. MELD provides an ongoing forum for the technical exchange of information on current and emerging issues relevant to atmospheric mercury deposition research and monitoring efforts within a broad multi-organization context including international, federal, state, and local agencies, academia, industry, and non-profit organizations.

The specific charges of MELD are to:

- Integrate the expertise affiliated with NADP mercury programs (e.g., Mercury Deposition Network, Atmospheric Mercury Network, and Mercury Litterfall Network) and mercury biomonitoring initiatives to identify data and science gaps, coordinate research efforts to fill those gaps, and better utilize the data.

4. Page 15: Remove AIRMoN and add MLN

ORGANIZATION OF NADP PROGRAM OFFICE DUTIES

Program Office					
Network Administration	Management	Meetings & Trainings	Data & Publications	Quality Management	Strategic Planning
NED	Contracts	Meetings	Public Internet Database	Site Certification	Special Studies
CAL	Budget & Funds Management	Training Materials	Site Documentation	Field Quality Assurance	External Partnerships
NTN	Correspondence & General Information	Outreach	Data Processing	Laboratory Quality Assurance	
HAL			Reports & Brochures	Data Verification	
				Quality Assurance Documentation	

5. Page 16: Delete AIRMoN and move up Mercury Deposition Network and add paragraph on Mercury Litterfall Network

~~ATMOSPHERIC INTEGRATED RESEARCH MONITORING NETWORK (AIRMoN)~~

~~The AIRMoN measures the same analytes in precipitation as the NTN, but measurements were designed to provide data with a greater temporal resolution; thus the samples are collected on a daily basis when precipitation occurs. This short-term resolution enhances researchers' ability to evaluate the effect of emission changes, such as the controls mandated by the federal Clean Air Act, the potential impact of new sources, or source-receptor relationships in atmospheric models.~~

MOVE UP - MERCURY DEPOSITION NETWORK (MDN) – PUT LITTERFALL HERE

The MDN began measuring total mercury in precipitation in 1996 and uses a weekly

(a) sampling protocol. The MDN offers an

(b) *The Mercury Litterfall Network*: The Mercury Litterfall Network (MLN) was approved in 2021 to complement the MDN and the AMNet networks. MLN sites measure and quantify concentrations of total mercury found in plant biomass litterfall associated with a forest overstory (leaves, twigs, debris, etc.) that fall to the forest floor. This data assesses deposition and supplements traditional wet and dry mercury deposition. In combination with data from the MDN and AMNet networks, the litterfall data is used to examine ranges of mercury dry deposition, to estimate combined wet and dry mercury deposition, and to evaluate mercury models and develop trends over time.

(6) Last page: update version and approval dates on posed last page.

- iv) Catherine asked EOS if there was any discussion about proposed changes.
v) Catherine asked for a motion to present proposed changes/updates of the Governance Handbook to the Executive Committee. Kristi Morris moved and Selma Isil seconded.

vi) Discussion:

(1) Colleen Flanagan Pritz: After a quick read through, didn't see methyl mercury in litterfall network (page 16). Suggested the following change:

- (a) "and quantify concentrations of total **and methyl-mercury**"
(b) Catherine will amend

vii) Voting on the motion – show of hands/ thumbs up and down on Zoom. Motion passed.

c) NADP Fact Sheet (Catherine Collins)

- i) Four-page document containing
1. History
 2. Highlights Networks and Lab
 - (a) NTN, MDN, MLN, AMNet, AMoN
 3. Membership

NADP – EOS Fall 2022 Meeting Minutes

- 4. Addressing Data Gaps and Building Capacity in Monitoring Networks
- 5. Data Quality and Availability
- 6. Highlights Science Committees
 - (a) TDep, CLAD, AMSC, MELD
- ii) Thanks to Kevin Hollerbach (and Melissa Puchalski) from EPA/CAMD for doing layout and formatting!
- iii) Should be ready by the Spring 2023 meeting for publishing.
- d) Wikipedia Page (Christopher Rogers)
 - i) EOS Officers Reviewed Changes Made the Wiki page since the Spring 2021 Meeting
 - 1. Mike Randall will be helping with making updates to Wikipedia page
 - 2. One reference was edited since the Spring meeting.
 - 3. 462 page views from April through November 2022.
 - 4. No progress has been made on removing the tags that were applied during January 2022. We have volunteers to be a part of an Ad Hoc committee to determine how best to get the tags removed. We are planning on having a meeting in early December to discuss the plan. Update in the Spring
- e) Education & Outreach Team/ Education Learning Module Proposal (Catherine Collins)
 - i) Project title: NADP EOS learning modules for elementary through high school students
 - ii) Brief project description: Seeks to enhance STEM education by providing hands on learning modules that use scientific and mathematical principles and NADP data. The modules will be available online for educators and NADP members.
 - iii) New prospect for a team member and seeking an additional EOS member to lead the effort.
 - 1. Michael Randall volunteered for the learning module.

3) Social Media Update (Catherine Collins & Katie Blaydes)

a) Social media schedule:

Month	Committee/Other Content
January	Link to the Fall Meeting
February	EOS
March	NOS/Spring Meeting
April	AMSC
May	TDEP/Air Quality Awareness Week
June	CLAD
July	CityDep/Call for Abstracts
August	NOS/Meeting registration
September	MELD/Educational materials for science fair inquiries
October	QAAG
November	Fall Meeting Highlights
December	None

- b) Social media team:
 - i) New volunteers: Anita Peterson (WSLH)
 - ii) Seeking additional volunteers – use signup sheet
- c) Social media highlights (Katie Blaydes)
 - i) Increase in followers on the account
 - ii) Popular posts: Dragonfly sampling, Nichole Miller (QA specialist), hail at agricultural station
- d) Air quality awareness social media collaboration (Catherine Collins)
 - i) Seeking volunteers to help with creating social media posts for air quality awareness week
 - ii) Copy ready, just need to push it out on NADP Facebook page

May 1 – 7, 2023	Theme Topic Examples
Monday	Wildfires and Smoke
Tuesday	Asthma and Your Health
Wednesday	Participating Science and Sensors
Thursday	Environmental Justice and Air Quality
Friday	Air Quality Around the World
Saturday	Air Quality Education Resources & Activities

4) EOS Completed Work (Catherine Collins)

- a) Social media posts continue
- b) Drafted Governance Handbook changes
- c) Met with the committee officers and representatives in Feb 2022 and July 2022
 - i) **Purpose:** EOS is convening this meeting twice a year in between the Fall and Spring NADP Meetings to touch base and make sure that we are up to date with how EOS can help the committees with their outreach activities.
 - ii) **Action items**
 1. Each committee was tasked with the following:
 2. Review Wikipedia page and add any appropriate links
 3. Review your committee’s section on the NADP webpage
 4. Provide two names for your committee to be the EOS representatives
 5. Round Robin Updates
 - (a) CLAD – AQAW and FS Critical Loads videos will be adding to NADP Critical Loads webpage.
 - (b) TDep – Updating the TDep Maps and will provide revisions for webpage. They are looking for help after the Spring Meeting to promote TDep’s summer forum.
 - (c) MELD – Mercury brochure was to be published on the website that week. They are looking at updating the Hg infographic by animating the Hg cycle.
 - (d) NOS – no projects needing EOS support.
 - (e) EOS – once all the Fact Sheets, Brochures, and Videos are complete, create a bundled package with links that could be sent out to managers/interested parties
 - iii) Save the dates for committee chairs meetings:

1. Winter Meeting: Thursday, Feb 23, 2023: 2 – 3PM ET
 2. Summer Meeting: Thursday, July 20, 2023: 2 – 3PM ET
- d) Disclaimer language on NADP reports
- e) Drafted final IP Review Process
- i) Previously called scientific integrity but just a policy to review scientific products
 - ii) Following has been reviewed by NADP members and incorporated comments
 - iii) Guidelines for review of NADP documents -- MOTION TO APPROVE
 - iv) **Policy for Review of Information Products (IP), Published by the National Atmospheric Deposition Program**
 - v) **Purpose and Scope:** This policy documents the requirements and protocols for publication of information products (IPs) derived from National Atmospheric Deposition Program (NADP) data. For the purposes of this policy, an IP is considered a report, poster, brochure, or other graphic or interpretive work that describes the scientific meaning of the data for other scientific uses or for the public. The intent of this policy is to ensure that IPs published by the NADP, on the NADP web site or in printed form, are prepared with a standard of quality to withstand scrutiny by the scientific community and the public. This policy applies to IPs that have not been reviewed through an agency or a journal peer review process. This policy exempts previously published reports or journal articles that have withstood the rigors of an agency approval process.
 - vi) **Review and Approval Process**
 1. An IP shall be peer reviewed and approved for publication by the NADP using the following process:
 2. The author(s) shall present the draft IP to the NADP Executive Committee (EC) Secretary/NADP Coordinator to commence the review and approval process. The transmittal shall include:
 3. Title of the IP and list of authors and their affiliations.
 4. Names of peer reviewers and their affiliations.
 5. Within 2 weeks of receipt of the draft manuscript, the EC Secretary/NADP Coordinator shall acknowledge the receipt of the draft and determine whether the peer review process should commence. If an acknowledgement has not been received within 2 weeks, then the author(s) have automatic NADP approval to proceed with the peer review process. If the EC Secretary/NADP Coordinator is a contributor to the IP, a designee may be selected to manage the review on their behalf.
 6. The authors shall select two (2) reviewers to evaluate the draft IP, at least one of whom is familiar with the NADP, the NADP networks and their data products. At least one of the reviewers will have expertise with the subject matter of the IP. The authors will determine the time frame for the peer review comments. Peer reviewers may **not** be authors or other people who helped produce the IP. Review, editing, and final formatting by a technical editor is highly recommended.
 - (a) Peer reviewers may **not** be authors or other people who helped produce the IP. Review, editing, and
 7. Once the peer review is complete, the author(s) shall write a transmittal email to the EC Secretary/NADP Coordinator with the following content:

- (a) Any major comments or corrections made per the peer reviewers' comments.
 - (b) Statement that the IP is ready for publication by NADP and suggested locations for publication (website, fact sheet, etc.)
 - (c) The final copy of the IP.
8. Within 2 weeks of receipt of the final IP transmittal, the EC Secretary/NADP Coordinator or designee shall:
- (a) Review the IP submittal and assign an NADP chronological report number to the IP, and
 - (b) Transmit the final IP to the NADP PO webmaster at: NADP@slh.wisc.edu for posting on the NADP web site.
9. Within 30 days of receipt of the final IP by the NADP PO, the EC Secretary/NADP Coordinator or designee shall ensure that the IP is published on the NADP web site.
- vii) Discussion
1. Mike Bell: Based on NPS process, which is similar, would recommend changing the language to the “secretary will find two peer-reviewers, but authors can recommend peer-reviewers)
 2. Kristi Morris: Instead of “coordinator/secretary” make this “coordinator *and* secretary”
 3. Greg Whetherbee: There is an incomplete sentence on one of the pages.
 4. Catherine Collins: The incomplete sentence was a copy/paste error.
- Motion to approve with suggested changes: Kristi Morris moved, and Mike Bell seconded (double check at 25:02). Motion approved in-person and online.

5) **New Business – Open Forum**

- a) Social Media Questions - Twitter (Chris Rogers)
- i) What should EOS do?
 1. Officers think we should move away from Twitter and move towards LinkedIn
 2. Michael Randall: Possible alternate to Twitter: <https://joinmastodon.org/>
 - ii) What should NADP do?
 - iii) What about the new CLAD twitter account?
 1. Mike Bell: Jennifer Holguin started the Twitter a few weeks ago to better communicate products. While Twitter for NADP might be disintegrating, the academic Twitter world is active. We are using it to be involved in active conversations and not planned Tweets a few weeks out. Less of a promoting and more of participating in an ongoing conversation.
 2. Chris Rogers: How did you establish the account? If other groups wanted to do this? Is NADP okay with how you did this?
 3. Mike Bell: We didn't reach out and decided to set up the account under Gmail account and then it isn't tied to NPS. It provides a space not to speak as NPS. We could set up a CLAD account through WLSH. Mike and Jennifer went through and followed folks who are working on relevant research.
 4. Comment: What are the major concerns about staying on Twitter? Is it that it isn't useful?
 5. Chris Rogers: We also want to follow the leads of other agencies. Are we okay with the model of using a personal account or is it better to do as we are doing by planning outposts and getting fewer interactions.

6. Comment: Are there security concerns with Twitter?
 7. Chris Rogers: I don't even know what to be concerned with.
 8. Jennifer Holguin: It might be useful to see our Twitter. We are just reposting already peer-reviewed papers. We are not making up posts.
 9. Chris Rogers: We aren't worried about them in that way.
 10. Colleen Baublitz: What are the other agencies doing? Perhaps it is worth waiting to see what they are doing with their agency accounts.
 11. Andy Johnson: Maine DEP just had this conversation a few weeks ago and decided to continue using it for air quality forecasts and air quality awareness week. We plan to continue using the platform as we have been.
 12. Rick Haeuber: We have a Twitter account we use for CASTNET and there are discussions happening at higher level at EPA, but nothing has trickled down.
 13. Catherine Collins: A question then is, do we need to have a process for creating other subcommittee Twitter accounts.
 14. Mike Bell: One of the nice things about the way we set CLAD Twitter up is that Jennifer and I both have access. It takes less time per person and try to get more folks from the lab engaged. In a couple of months, we can figure out if it is useful. If we can get one person to come to our spring meeting from Twitter, it will be useful.
 15. Chris Rogers:
 - (a) It sounds like it is too premature to make decisions about whether to continue with the platform. WE can revisit this in the spring.
 - (b) Is everyone okay with the CLAD approach? Should EOS have a process? We could end up with a lot of Twitter accounts semi-representing NADP.
 16. NAME (43:56): What if the individual that holds the account that decides to pursue something else, we might want to have someone central at NADP to hold the account. Perhaps all the subcommittees create a Twitter through NADP.
 17. Mike Bell: That would be a great idea. It might be a discussion for a later time but having a centralized email account could make things easier.
 18. Nichole Davis: Would it make sense for NADP to have access to all of the accounts just in case? If someone leaves or if something happened, NADP would be able to access it.
 19. Catherine Collins: Sounds like we should explore setting something up at NADP for these social media accounts. We can ask our social media team to look at this.
- iv) Plans of other partners?
 - v) Discussion:
 1. Katie: Twitter is the least important social media. Instagram tends to see more traffic and interactions.
- b) Student Papers and Posters (Catherine Collins)
- i) Student papers and posters judges at the science symposium
 1. Nine papers and six posters at this fall meeting
 - ii) Judges:
 1. John Walker
 2. Greg Beachly
 3. Selma Isil
 4. Jennifer Holguin

5. David Gay
 - iii) Updates: moving from a paper version of scoring to a evaluation form on mobile phones. Unfortunately, having technical difficulties during this conference but hope to move towards mobile-version in the future.
- c) Committee – Volunteers for EOS officer (Catherine Collins)
 - i) Katie Blaydes will no longer be able to serve as secretary and Chris Rogers will continue to serve as co-chair but will move on.
 - ii) Seeking volunteers to serve as new secretary – nominations requested for these positions
 - iii) Discussion:
 1. Kristi Morris: Are there some junior folks at WLSH that could take on the role?
 2. Mike Bell: there are two sides to this role. Social media and by-laws/reports. Emmi Felker-Quinn might be interested in playing a role when she returns.
 3. Chris Rogers: Emmi did a wonderful job with the air quality awareness week.
 4. Catherine Collins: Anyone motivated to volunteer? We will keep searching and looking to fill these roles.
- d) Updates from the committees.
 - i) Requested updates from the science and technical subcommittees:
 1. Brief committee updates.
 2. What is your committee doing for EOS?
 3. What can EOS do for your committee?
 - ii) *CLAD* (Jennifer Holguin): Emmi Felker-Quinn is the main officer, but I helped with Twitter posts with June takeover for NADP. If you have a personal Twitter, follow the *CLAD* account and we can share posts!
 - iii) *TDep* (Greg Beachley): Measurement modeling fusion factsheet needs to be updated. We will use the new IP process with the factsheet. I have an EPA sharedrive and wants to discuss about an NADP sharedrive to store files – perhaps EOS could help us.
 - iv) *ASMC* (Andy Johnson): April timeframe for social media posts is great. We also have a paper that will be published and want EOS to help us advertise it.
 - v) *MELD/Litterfall* (Colleen Flanagan Pritz): Richard Tanabe joined us at the arboretum last spring and filmed the sampling of dragonflies. A professor then took her students out. Richard will convert the video and encourage participation in a spring 2023 offering of the arboretum. Does the plan still exist to bus to the arboretum to sample dragonflies? It could be a great outreach opportunity to engage many stakeholders. We don't have plans to create a Twitter account currently.
 - vi) *NOS* (Ryan McCammon): If NOS has something to say regarding social media, we will convey it to EOS and then EOS can post it.
 - vii) *DMAG* (Chris Rogers): No update
 - viii) *QAAG* (Martin Shafer): We have made some motions approved in terms of citing criteria and may be useful to get them out to the larger community. It might be useful to run through some data quality objectives for next year.
 - ix) *CITYDEP*: No update
- e) Meeting Adjourned (Catherine Collins)
 - i) Open forum
 - ii) Another call for EOS secretary.
 - iii) Motion to adjourn. Andy Johnson moved, and Kristi Morris seconded.

6) Participant List

a) online

- Michael Randall
- Ting Wang
- Winston Luke
- Cheryl Sue
- Jason O'Brien
- Jim Renfro
- Cari Furiness

b) In-person

- Catherine Collins (Co-Chair)
- Chris Rogers (Co-Chair)
- Katie Blaydes (Secretary)
- Colleen Baublitz
- Greg Beachley
- Mike Bell
- Doug Burns
- Rebecca Dalton
- Nichole Davis
- Emmi Felker-Quinn
- Colleen Flanagan-Pritz
- Cari Furiness
- David Gay
- Linda Geiser
- Dana Grabowski
- Rick Haeuber
- Jennifer Holguin
- Selma Isil
- Andy Johnson
- Bob Larson
- Winston Luke
- Amy Mager
- Ryan McCammon
- Kristi Morris
- Jason O'Brien
- Melissa Puchalski
- Michael Randall
- Jim Renfro
- Martin Schaefer
- Jamie Schauer
- David Schmeltz
- Cheryl Sue
- John Walker
- Tin Wang
- Greg Wetherbee