Executive Committee Meeting Minutes Spring Meeting May 19, 2020 Virtual

#### **Members and Participants Present**

David Gay, Bob Larson, Jim Hermanson, David Schmeltz, Richard Tanabe, John Walker, Nathaniel Javid, Ryan McCammon, Winston Luke, Jan Klawitter, Douglas Buhler, Chris Rogers, Greg Beachley, Greg Wetherbee, Melissa Puchalski, Doug Burns, Anne Marie Macdonald, Catherine Collins, Richard Grant, Linda Geiser, Rick Haeuber, Kristi Morris, Jeffrey Herrick, Amy Mager, Jason Lynch, Andrew Johnson, Katie Benedict, Jamie Schauer, Camille Danielson, Martin Shafer, Mark Olson

#### **Voting Members Present**

David Schmeltz (Chair), Doug Burns (Past Chair, Budget Advisory Subcommittee Chair) Greg Wetherbee (Vice Chair), John Walker (Secretary), Melissa Puchalski (NOS Chair), Catherine Collins and Chris Rogers (EOS co-Chairs, one vote) Richard Grant (SAES Representative)

#### **Motions Passed**

**a**Motion presented by David Schmeltz to approve Fall minutes with Melissa Puchalski edits. Melissa Puchalski second. Motion passed by virtual polling.

Motion presented by David Schmeltz to approve all committee reports. Andy Johnson moved. Catherine Collins second. Motion passed by virtual polling.

Motion presented by David Schmeltz to renew CLAD and TDep committee charters. Rich Grant moved. Melissa Puchalski second. Motion passed by virtual polling.

Motion presented by David Schmeltz to establish MELD as a science committee. Melissa Puchalski moved. Greg Wetherbee second. Motion passed by virtual polling.

Motion moved by Greg Wetherbee regarding bag samples. The Executive Committee minutes shall show that the NADP shall not remove, qualify, or downgrade the quality ratings of any data in the NADP databases for samples collected using bag-lined buckets within the period 2014-2020 based on the premise that the samples were collected using a plastic liner different from the one later found to be preferred by NADP. Previous studies by the CAL and PO have shown that the polyethylene sampling bags used during 2014-2020 do not significantly alter the quality of the NADP precipitation sample species when compared to the bucket-only precipitation sample. Seconded by Rich Grant. Motion passed by virtual polling.

Motion moved by Doug Burns for the Executive Committee to adopt the 9 proposed initiatives to guide our strategic planning moving forward and to establish ad hoc

committees to further develop each initiative. Greg Wetherbee second. Motion passed by virtual polling. See discussion.

## **Opening of Meeting**

David Schmeltz opened the meeting.

## Approval of Fall 2019 minutes

It was noted that the Fall 2019 minutes were drafted by Nathaniel Javid and Greg Wetherbee with corrections by Melissa Puchalski. David Schmeltz made a motion to approve the minutes. The motioned was seconded by Melissa Puchalski. The minutes were approved.

## Program Office Report - Mark Olson

Mark Olson provided the Program Office Report. David Gay is the new NADP Coordinator. Priorities will include a renewed focus on the budget, specifically to nail down network costs and costs per site. Strategic Plan to move NADP into the future will be another area of focus. Over the next few weeks the PO is working through action items (approximately 40) identified in the Spring Meeting.

The transfer of HAL (June 1, 2019) and MDN from Eurofins to WSLH is complete. A number of efficiencies have been gained already. Transfer date was moved up from October to June so the Readiness Validation Plan had to be accelerated. New instrumentation was purchased, Christa Dahman was hired as the new Trace Element Clean Lab Supervisor and Kirsten Widmayer was promoted to HAL chemist. A new HAL LIMS system was developed.

During 2020, data reporting and the web site will be focus areas. The website will be managed by webmasters at UW Dolt. The LIMS will be managed by the WSLH IT group and the PO will focus on web content, data posting, and network improvements. The Strategic Plan will be another area of focus in 2020.

Regarding data, UW DoIT will upgrade the Web site to Wordpress and make it mobile friendly. The current LIMS system was inherited from University of Illinois. A full-time programmer has been hired to upgrade the LIMS, which will now accommodate the HAL. Bob will work with the programmer to develop a new, more streamlined precipitation review system that will be consistent across networks. Another programmer will also be cross-trained to help with these responsibilities.

The "Sites in Jeopardy" report will return. This is the #1 action item on the PO list from the Spring meeting. Network site activity in 2019 showed NTN was steady, MDN was down 9% (9 sites lost), AMoN up 4% (4 sites added), 0 AIRMoN sites remaining (ended in September 2019), and AMNet down 38% (13 sites lost).

All litterfall activities will move to WSLH. An MDN development plan is in the works to try to increase the number of sites. NADP will work with MELD to enhance mercury programs, including investigation of the use of passive elemental samplers and alternatives to current

wet deposition methods (e.g., longer sampling durations). The passive sampling effort could build on current ECCC monitoring activities.

AMNet site visits are currently required to occur every two years. In 2018 there were 5 site visits, and one exceedance by three months (beyond 24 months). In 2019 there were 6 site visits and two exceedances both by 9 months. In 2020 there have been no sites visits and 5 sites are in exceedance. Some travel has been postponed due to COVID.

UW will have to impose furloughs due to COVID-19. The total is about 85 days total for NADP, based on employee salaries, and must be taken between May 15 and Oct 31, 2020. Impact will not be visible to external partners.

Acid Rain 2020 meeting leaning toward March 2022 with NADP representation planned. The Asia-Pacific Mercury Monitoring Network Workshop is likely to be postponed. Installation of GEM analyzer in Jakarta also postponed.

Dave Schmeltz remarked, in terms of priorities, getting a handle on network costs is on top of the list. Previously it was agreed that subscriber fees were supposed to go up in 2021. May want to hold off on that until the PO has a better understanding of costs.

## NOS/Joint Report - Melissa Puchalski

Joint had two motions. Motion to accept the fall minutes passed. A second motion presented by Doug Burns to change the number of Hg litterfall samplers from 8 to 4 beginning in 2020. Moved by Mark Olson, second by Winston Luke.

Richard T. showed COVID-19 impacts to the networks were minimal – about 10% of the NTN sites were suspended in March/April. The PO/labs continued to operate with modified schedules. The PO communicated with 229 sites about site status, alternate shipping addresses, holding sample information.

CAL update: Lachat discontinued production of the flow injection system used for AMoN and NH4 analysis so the lab needs to consider a path forward. Small negative bias in pH data from May 2018 – Feb 2020 discovered because of USGS lab intercomparison program – pH meters were using the factory calibration settings. Suggest adding a note to the dataset but no further discussion in Joint.

NOS had 3 motions. Motion to approve meeting minutes passed.

Mark Olson presented a motion: PO will purchase the KJJ sampler and co-locate with Aerochem and NCON, and Canadian sampler at Eagle Heights. Second Winston Luke. Motion passed.

Chris Worley presented a motion: PO/CAL will switch to the to the Canadian-style mylar/polyethylene bags assuming three conditions are met: 1) Nutrient losses are less than the NTN MDL, 2) Acceptance on approved bag quality language in the vendor contract, and 3)

If the previous two conditions are not met, then the PO will proceed with the original polyethylene bag rollout. Schedule: June/July 2020 for approved vendor language. August/September 2020 for first bag from contractor. September/October 2020 for staggered rollout of bags to sites.

PO agreed to work with EEMS to improve field issues impacting data quality.

Richard Grant asked question about discussion of prioritizing site closures and if there is a subcommittee working on that. Melissa replied that there is not a subcommittee looking at it but it will be discussed in Budget committee. Budget will come up with some broader criteria for prioritizing sites, then bring that to Exec. Agency sponsors will get together to develop some broader criteria for prioritizing sites that will then be brought to Exec.

## **EOS Report – Catherine Collins**

Minutes from fall meeting were approved. Motion proposing a change to governance document to add EOS name and mission and awards section passed. EOS developed SOP for adding content, which committees will add. Foundation letter is now on NADP site and outreach to past members and other parties will now start. A committee has been formed for the education and outreach plan and will start looking into science fair video lessons and things like that. Good draft of Mercury in Rain has been put together and a committee has been formed to complete the document. Bob is updating maps for AMoN brochure. Developed a calendar for individual committee responsibilities for updating social media highlights. New business included a motion that committee meeting minutes will be drafted and sent out to committees for comment within one month and uploaded to website within 6 weeks of meeting.

#### QAAG Report – Camille Danielson

QAAG met at end of April. Spent lots of time talking about QA documents. The QA staff are now completing HAL/CAL combined QA plan which is under review. Network QMP/QAP being reviewed by the PO along with several other documents. External HAL/CAL audits are being postponed to 2021. PO audits will likely occur in coordination with 2021 budget meeting. Internal audits done. Only MDLs changing in 2020 (we are just now publishing 2020 data with new MDLs) are for AMON.

Had call with ECCC bag supplier this morning and NADP could possibly begin rolling out to NTN sites in August. Will have quote within a couple of days. It would be good to have networks (CAPMoN) using same type of bags.

## DMAG/IT Report - Bob Larson

MDN LIMS is done and getting caught back up with data now. Have been training a programmer over past year on all things NADP. Precipitation data review will be improved over the next year. The NTN system is being updated, including developing a query reporting system for internal staff. Maps should be coming out in a more timely manner than they have in the past couple of years. Scripts for generating map displays from grids will be updated.

Website will be updated to Wordpress by UW Dolt. Goals for 2020 are to catch up with data, website conversion, mapping updates and further software developments. Bob Larson is starting a data analysis project reviewing NTN screening level (sl) scores, which are used to identify contaminated samples based on whether they are outliers.

## CLAD Report – Jeff Herrick

Highlights from CLAD Monday session on *Applications of CLs by Federal Agencies* were recapped. 71 participants from US, Mexico, and Canada. Presentations from Federal agencies addressed how they use critical loads. Each presentation also addressed charge questions. Business meeting was held on Wednesday. Fall meeting minutes were approved. There were no additional motions. Linda Geiser is developing a series of videos as part of CLAD outreach. Each will be about 8 minutes long.

Jeff presented CLAD 4-year highlights for charter renewal. The CLAD renewal document is left out for brevity.

## TDep Report – Greg Beachley and John Walker

TDep Meeting – Greg provided a brief summary of the TDep meeting highlights. There was a max of 84 attendees during meeting.

Greg Beachley made a motion to nominate Katie Benedict as the next TDep co-chair to replace John Walker, which was seconded by Donna Schwede. Motion passed. There were no Fall meeting meetings to approve due to TDep agricultural workshop. There were no additional motions.

Charter renewal – John Walker walked through the TDep 4-year highlights summarized in the charter renewal document, which is included here.

TDep Activities and Accomplishments Since Last Renewal

#### <u>Changes to Committee Structure</u>

In 2019, TDep adopted a workgroup format to help distribute workloads, provide more opportunity and accessibility of projects to committee members and promote collaboration. The current committee structure includes Stakeholder, Measurement Model Fusion (MMF), and Deposition Uncertainty workgroups. In 2020, TDep will begin hosting the Urban Deposition Science Committee (CityDep) chaired by Greg Wetherbee (US Geological Survey; USGS) at biannual meetings. In addition, the Education and Outreach Subcommittee (EOS) developed new charges at the Fall 2019 Executive Committee Meeting. As part of this reorganization, TDep currently has two representatives to EOS. The Mercury in the Environment and Links to Deposition (MELD) science committee was also formed in 2019. Mercury deposition activities previously conducted and discussed within TDep will likely shift to MELD.

The remaining summary document can be found with the TDEP minutes.

# MELD Report - Rick Haeuber

This was 2<sup>nd</sup> MELD meeting since the committee was given ad-hoc status. Was pleased with turnout (56 attendees max). First day focused on Minamata Convention and had a presentation from the State Department. MELD will weigh in on science of Minamata convention. Several discussion papers on biotic monitoring were presented. On day two David Schmeltz and David Gay presented a discussion paper on Hg monitoring and potential to enhance current monitoring efforts. That was followed by presentation of a discussion paper on biotic perspective of monitoring and then meeting wrapped up.

Main outcomes where that MELD will weigh in on science of Minamata convention. Will form a measurement/model workgroup to help plan webinars and in-person workshop to discuss future Hg monitoring within NADP. MELD is following CLAD/TDep workgroup structure. Committee will explore options for estimating deposition at dragonfly sampling sites to link deposition with ecological receptors. Will be planning for fall meeting in 2020.

There was one motion for MELD to be granted science committee status.

CityDep Report – Greg Wetherbee: Greg submitted a summary report (see committee min.).

CityDep Goals: Expand NTN and MDN to include more urban sites, and improve spatial representation of wet-deposition for urban areas in the NADP interpolated map products.

CityDep research is exploring variability of N deposition in urban environments, source attribution using trajectory modeling and stable isotopes, and reaction chemistry unique to urban environments.

Status: CityDep sites on the East Coast are down, Pam Templer's urban N network in Boston is currently down, 2 Denver sites moved to Fort Collins, leaving 2 urban sites in Denver, and 2 in Boulder. Boulder and Fort Collins sites are going to operate until January 1.NTN site CO83 (Timnath, CO) was installed and is scheduled to operate until January 1, 2021.

RCN Proposal – Rich Pouyat and Leora Nanus will coordinate a meeting in the coming weeks to begin the process of writing an RCN proposal to NSF. The grant would fund Rich to hold webinars, workshops, and travel to meetings with stakeholders to encourage collaboration on urban deposition monitoring and research.

#### Aeroallergens Report – Andy Johnson

Aeroallergens did not have a spring meeting but will have conference call in June. As noted at Joint, no co-chair has been identified.

#### **Budget Report – Doug Burns**

Starting to plan summer budget meeting. Dates have been identified as Aug 25-26<sup>th</sup>. Inperson meeting would be a single day with option for remote connection. Virtual meeting would be 2 days.

## Wrap-up of Committee Reports

Dave Schmeltz presented the motion to accept all committee reports. Andy moved. Catherine Collins seconded. There was no discussion and the motion passed.

Dave Schmeltz then presented the motion to renew CLAD and TDep charters. Rich Grant moved. Melissa Puchalski seconded. There was no discussion and the motion passed.

Dave Schmeltz presented the motion to establish MELD as science committee. Melissa Puchalski moved. Greg Wetherbee seconded. There was no discussion and the motion passed.

Greg Wetherbee presented a motion in the chat box: "The Executive Committee minutes shall show that the NADP shall not remove, qualify, or downgrade the quality ratings of any data in the NADP databases for samples collected using bag-lined buckets within the period 2014-2020 based on the premise that the samples were collected using a plastic liner inferior to the one later found to be preferred by NADP. Previous studies by the CAL and PO have shown that the polyethylene sampling bags used during 2014-2020 do not significantly alter the quality of the NADP precipitation sample species when compared to the bucket-only precipitation sample." Seconded by Rich Grant. Discussion.

David Schmeltz called for a vote on the motion with friendly amendment. "The Executive Committee minutes shall show that the NADP shall not remove, qualify, or downgrade the quality ratings of any data in the NADP databases for samples collected using bag-lined buckets within the period 2014-2020 based on the premise that the samples were collected using a plastic liner different from the one later found to be preferred by NADP. Previous studies by the CAL and PO have shown that the polyethylene sampling bags used during 2014-2020 do not significantly alter the quality of the NADP precipitation sample species when compared to the bucket-only precipitation sample."

#### **Old Business**

*IL11 sample archive update – David Gay.* David has been communicating with ISWS about the transfer of archive samples to WSLH had been approved in his office. Not sure if that is the final approval. There are about six large ice chests worth of samples. Dave Schmeltz asked about the timing of the transfer. David says probably sometime after June. UI is under a tight lockdown due to COVID19 and barely have access to buildings.

GOS4M – Dave Schmeltz. At the last executive committee meeting the committee endorsed NADP participation in the Global Observation System for Mercury (GOS4M). Started to scope out meeting details but GOS4M may be interested in metadata and more information on NADP Hg networks.

Strategic Plan – Dave Gay. David presented slides summarizing the status of the Strategic Planning

Initiative. Initial discussion resulted in the identification of 9 initiatives for which authors or groups of authors agreed to develop draft descriptions. Those drafts, which are individually in various stages of completion, have been pulled together in a single document. Initiatives include:

- NADP Governance and Organizational Changes
- Networks and Network Initiatives
- Expansion of NADP Participation and Audience
- Using New Technologies
- New Products to Increase Scientific Relevance
- Research and Scientific Developments
- Develop Strategies for International Engagement and Capacity Building
- Sustainability of NADP Networks
- Actions to Change and Improve the PO and Laboratories

Essentially this work serves as a proposal or motion to move forward with new initiatives. Doug Burns proposed a motion that we adopt these 9 initiatives to guide our strategic planning moving forward. Greg Wetherbee seconded.

Discussion

Dave Schmeltz called for a vote on the motion for Exec to adopt these 9 initiatives to guide our strategic planning moving forward and to establish ad hoc committees to further develop each initiative. None were opposed. Motion carried.

#### **New Business**

Fall Meeting – Greg Wetherbee. Greg suggests we go to a virtual meeting. Drop dead date for decision on in-person versus virtual meeting is August 1, at which point we will be obligated to pay for hotel rooms. Discussion on the virtual meeting be spread it out a bit by splitting up business meeting and science meeting? Jim Hermanson noted that we should be able to do it again with Zoom but we could use other platforms like Teams. It was decided that we will still have a symposium and Mike Bell says they are still planning on the CLAD workshop. David Schmeltz commented that we do not need to vote on this and Greg should just move forward with plan for virtual meeting symposium and business meetings, seeking input from folks as needed.

*MDN network stabilization strategy – David Gay.* David found a plan developed by Mike Olson and has added a few details to it and can send it around after completing updates. Will plan to discuss at Budget meeting and with Exec at the Fall meeting.

*Draft policy on online data removal – David Gay.* Mike Olson had started a document describing a policy for removing online data. David developed one of his own, an SOP describing the process for removing data that has already been finalize by Program Office and put online. David would like to know if Exec wants an SOP or a policy.

## Discussion

The committee agreed an SOP is sufficient. David will work with Camille on what needs to be in this SOP versus the PO data management plan.

Study on COVID-19 presence in NTN/CASTNET samples – David Schmeltz

Janice Brahney (Utah State) has developed a proposal to use NADP infrastructure to collect samples to analyze for presence of COVID19. Samples from 11 NTN sites, unfiltered sample and saved filters, will be analyzed by PCR. Will also deploy dry side buckets at MD99 and MI52 for analysis of COVID19 on particulates. NADP is not funding this work.

Jamie Schauer commented that WSLH has been doing a lot of work on quantifying COVID in environmental samples, which Martin Shafer reiterated, noting the large expertise at WSLH. Janice can call on them to review methods, data, etc. Communication with Janice in that regard should come from Exec, not WSLH since they were not involved in discussions.

*Update on PFAS Wisconsin DNR Pilot Study – Mark Olson.* Mark gave a presentation on development of PFAS methods at WSLH. Wisconsin DNR came to WSLH with funding to sample 7 NADP NTN sites around the state. WSLH helped with the sampling technique and WDNR created a training video. This is a 14- week study running from April 21 – July 28, 2020. PFAS continuing to grow as a hot topic. Interest from States and EPA in working with NADP/WSLH for targeted analysis of PFAS.

## **Agency Updates**

*USDA/NIFA* – Rodney Vance, through D. Schmeltz. We finally have Award Management Division staff in place to process the Interagency Agreements, so those are underway. The award is a Continuation award so it will also expire Aug 31, so we need to start working on that, but luckily we will be using a 'streamlined continuation' process for renewing (instructions coming soon) and it will be easy. The cooperative agreement is good for 5 years.

*NPS* - Kristi Morris. Interagency agreement paperwork submitted to NIFA several weeks ago. Has since been told to move forward with current sites.

*BLM* - Ryan McCammon. BLM recently received some extra money to put toward NADP for BLM, which carries us through June 2022.

FWS – Catherine Collins. FWS has a couple of sites where operators can't work. FWS funding for some programs is being cut but should be OK for NADP.

*NOAA* – Winston Luke. Status quo for NOAA going into next year. Grand Bay AMNet is shut down but is moving to Barrow, AK and will remain in AMNet.

*USFS* – Linda Geiser. The USFS is close to completing our obligation through NIFA for this year to operate our sites. USFS sites will remain unchanged at 38 NTN, one AMoN, one litterfall, and one MDN site.

*USGS* – Doug Burns. USGS portion of NIFA contract is finalized and in place. Doug is moving forward now to develop a site management contract similar to EPA.

Environment and Climate Change Canada - Anne Marie McDonald. ECCC has put a multi-year

contract in place with NADP. Expansion of AMON is on hold due to COVID. No timeline for ECCC employees to return to lab, which has been down since March. ECCC is working with CAL on pH bias issue and QA tests for ECCC bag order.

Maine - Andy Johnson. Support for continued monitoring for additional year (Oct 2021) is OK.

*LADCO* – Donna Kenski. Could not attend but sent email report to David Schmeltz. Our two AMNet sites are shutting down at the funder's request.

SAES - Rich Grant. Cautioned that we may see some universities being unable to support sites due to COVID impacts to budgets, and likley to persist.

*SAES Directors* - Doug Buhler. NRSP funding and relationship with directors is good. Renewed for 5 years last October.

EPA - David Schmeltz. Still dealing with budget rescission and affects base funding for future years. Through FY20 we are good but not sure about FY21.

## Meeting was adjourned