

Minutes of the NADP Executive Committee

May 16, 2019

Madison Concourse Hotel, Madison, WI

Meeting called to order by Doug Burns (NADP Chair) at 8:00 a.m.

Attendees: Doug Burns (USGS), Tamara Blett (NPS-retired), David Schmeltz (USEPA), Greg Wetherbee (USGS), Karelyn Cruz (NIFA), Nathaniel Javid (WSLH), Ryan McCammon (BLM), Mike Bell (NPS), Melissa Puchalski (EPA), Annemarie MacDonald, Rosa Wu (ECCC), Rick Haeuber (USEPA), Rich Grant (Purdue), Pam Padgett (USFS), Kristi Morris (NPS), Catherine Collins (USFWS), Chris Worley (CAL), Martin Shafer (CAL), Jamie Schauer (NADP PO), Mike McHale (USGS), Camille Danielson (CAL), Mark Olson (CAL), Bob Larson (NADP PO), Winston Luke (NOAA), Richard Tanabe (NADP PO), John Walker (USEPA), Greg Beachley (USEPA), Mike Olson (NADP PO), Andy Johnson (ME DEQ), *None on the phone.

Doug welcomed everyone and called the meeting to order at 8:08 a.m. Doug mentioned the distinction between a voting member and ex-officio and non-voting members. This information is listed in the governance document. Observers of the meeting do not vote.

Introductions.

Doug initiated a discussion of the minutes. David Schmeltz received a few minor comments on the minutes and will send along modified minutes. Tamara had some clarification on IL11 in the minutes, noting that it was a decision rather than a discussion in the minutes to send a letter to Illinois asking for the data.

Minutes from the Fall 2018 Executive Committee meeting were approved. Richard Tanabe moved, Greg Wetherbee seconded, and the minutes were unanimously approved.

State of the NADP – Mike Olson (WSLH/NADP Coordinator)

Mike Olson led the State of The Network meeting. Mike noted that the PO and CAL are fully staffed and operational. The current and next year's projected budget are balanced. With HAL now at the WSLH, all three components of NADP operations can share resources. Ultimately, this will lead to improved efficiencies, products and outcomes. Mike noted the UW Arboretum (WI06) with NTN, MDN, AMoN, and Eagle Heights Supersite is going to happen, but there are some issues getting it up and running. Sites will monitor black carbon and support network improvements and research. NADP PO is working with Madison Water Utility, UW, and others.

Sample Archive Requests

Mike discussed sample archive requests, noting we have developed a formal evaluation procedure to assess archive requests. PO developed a process for archive requests to ensure equity and transparency for requesting organizations: Mike noted a proposed new policy: A Guide for Sample Archive Request Evaluation and Approval. A paper copy of the policy was distributed to all EC members. For the historical sample archive, the majority of the active and long-term archive has been received from the University of Illinois, but they have not organized the samples and are in the process of organizing them.

Historical Sample Archive

Got the sample archive from PRI, but it is not well organized. It should be well organized and inventoried at WSLH by end of summer. The IL11 historical archive was not received, and the Executive Committee and Program Office have been working to have the samples released. A letter was sent addressing this and this will be discussed later. As far as network status, MDN network stability and growth is a concern. The mercury science group will add the ability to identify additional stakeholders nationally and internationally. Mike discussed the government shutdown, which strained the PO and CAL. We need a collaborative approach to develop a plan to deal with this potentially reoccurring event. Tamara Blett asked who's working on this plan. Greg Wetherbee responded that he's leading an ad hoc group to address this issue. Greg replied that he would have a plan for voting and approval, with the goal of a draft plan by budget meeting in August.

Shutdown: Strain on data quality and people. Plan among agencies needed to continue operations at federal sites during shutdowns in the future will be prepared for Budget meeting. Greg Wetherbee will lead the effort to develop the plan.

PO Outreach Activities: Mike noted that Jamie has been traveling internationally, noting NTN and MDN including NTN in East Asia (EANET and NIES) for MDN NIES and NIER. Mike mentioned that national and local outreach is being done including the National Monitoring Conference in Denver, NOAA Boulder Global Monitoring Division, NEON, LLO, Water at UW, NOAA Boulder, and UMN-Duluth among others.

PO/CAL Initiatives

NADP Foundation – allows donations for program operations
Equipment Leasing – temporary research support and mobile NADP sites
Shipping return labels – All networks, likely start with MDN, use discounted UPS rate from UW to reduce costs with sample shipping from sites. Also allows shipment tracking from field to CAL.
Passive samplers for AMNet.

The Executive Committee discussed costs of offering sites and research data. David Schmeltz mentioned that from an international perspective, there are a lot of places that could benefit from having this equipment. Therefore, we should consider that as part of a leasing strategy.

NADP Foundation – Mike Olson

Mike went over the foundation document for the NADP Foundation at UW-Madison. There is oversight for this foundation, to make sure we're using this appropriately. Management is also performed by UW Foundation. Jamie can complete the process with signature at the UW Foundation end, and EOS will develop a strategy for outreach. The Executive Committee has the responsibility to charge EOS with that task. The Executive Committee noted that this guideline will be set in stone, so we should allow for some flexibility as people will be donating with intent of purpose.

Motion: Wetherbee – “The NADP EC approves the creation of the NADP Foundation to be administered by the University of Wisconsin / Wisconsin State Laboratory of Hygiene. The purposes of the foundation shall be consistent with the goals and objectives of the NADP. The EOS subcommittee will be tasked to

coordinate outreach and promotion of the foundation with the PO. The PO and NADP PI and(or) a designated representative shall report on the status of the foundation at each EC meeting and the Budget Committee meeting.” Pam Padgett seconded, and the motion passed unanimously.

Reports of Committees, Subcommittees, and Advisory Groups

NOS Report – Richard Tanabe

Richard noted that two motions come out of NOS (one is an award, and the other is accepting the recommendations for bromide. That is, removing bromide from the website, continuing quantification of bromide, and preparing a report detailing the outcomes of the study and special studies will be reviewed on a case by case basis.)

Doug asked about having a process for how the awards work and if we have a process for them. Pam noted that it should be a cooperative effort but not just EOS. Rich Grant suggested having the past chair handle this. Bob Larson mentioned formally keeping track of the people who win these awards. The Executive Committee discussed the administration of these awards. Greg noted that the criteria for these awards would be 1) you're retiring, 2) you've administered a significant portion of the program, and 3) you've made a contribution that is lasting beyond your tenure in the organization. This would be the lifetime achievement award. The second award is meritorious service. Greg Wetherbee will work with Tamara Blett to develop the policy for the awards. The charge of an awards evaluation group: Request and received nominations for awards for exceptional contributions for NADP. Then, coordinating the evaluation of those nominations. From this discussion came a motion to give Robert C. Brunette the Ellis B. Cowling lifetime achievement award with Eurofins Frontier Global Sciences on the award.

Motion to remove Br⁻ data from the website and discontinue as an official analyte. Make the IC method available online. Issue a report on how NADP CAL/PO came to these results. Doug initiated a discussion on the resolution of the Br⁻ data issue. PO will get Greg a letter about the Br⁻ data for Greg to take to the USGS Bureau Approving Official to justify a retraction of the Br⁻ paper in Environmental Pollution and the USGS Data Release for the paper.

Richard also presented several other motions. One is with sampling procedures in the CAL for low volume samples (WA type samples), the second is regarding bag sampling, and the third is for a special studies plan and cost structure.

Motion proposed by Camille Danielson: The CAL shall evaluate/consider a new protocol for WD samples, including samples formerly designated as sample type WI, such that:

- 1) Every sample will be considered for filtration,
- 2) Samples will be filtered as feasible with subsequent dilution up to 25 mL, and
- 3) The diluted samples will be analyzed per the current analyte priority protocol
- 4) Amendment – initial results and evaluation to be reported back at the Fall 2019 meeting

Bag sampling was approved for NTN by NOS. Doug indicated that several people expressed concern about using only 1 lid for sampling and suggested that the 2nd lid might address issues of bucket exposure during switch out. Richard indicated that many site operators use only 1 lid anyway. Mark Olson explained that a 2nd lid will go out to the field to use if it was windy or precipitating. Doug concluded that the protocol was acceptable. There were no amendments to what was decided.

Mike Olson and Amy Mager moved to approve a plan for implementing special studies requests to the CAL (e.g. saving filters, split samples, special analyses, etc.) and an associated cost structure. The motion was approved by NOS, and Mike will forward the plan to the Executive Committee.

There are also two motions for equipment updates. The Ott Pluvio 2S rain gage was approved as an official gage in NADP networks. The NOS also approved PO purchase of an ECCC modified D400 model collector for testing (~\$9,500).

Finally, a motion to adopt the WSLH Environmental Health Division's (EHD) records storage and disposal policy for all NADP paper records was approved. By the approved, amended procedure, NADP will continue to scan all paper documents and hold them internally for at least 12 months after the end of a calendar year, then pack them for State Archive storage. NADP will follow EHD RDA which requires a minimum of 6 year retention. For NADP Executive Committee records, all site files will be retained in the PO indefinitely.

EOS Report – Pam Padgett

A mercury brochure draft was provided by David Gay, and he will work with Marty Risch to finalize it. EROS changed its name to EOS and changed leadership with co-chairs. A motion was to adopt the new mission and charges for the EOS subcommittee. EOS also changed the leadership structure with two co-chairs and a secretary. Only 1 may vote in EC.

A motion was made by Doug Burns to rename the Ecological Responses and Outreach Subcommittee to Education Outreach Subcommittee with a mission as presented by Pam Padgett (EOS Chair) and approved by the EOS. Doug Burns mentioned that it is the responsibility of the group to maintain the governance handbook and suggested if that should be explicitly stated in the EOS charges. Rich mentioned that it is really the Chair's responsibility. The motion is the name of EROS will change to EOS and will be guided by the set of the mission statement from May 14th with the slight edits incorporated from today's meeting. Richard Tanabe made a motion to approve, and Rich Grant seconded the motion. The motion passed.

Doug indicated that Jan Klawitter suggested getting changes in place immediately because meetings are booked a year in advance. Pam proposed an ad-hoc committee to work on meeting scheduling. Several NADP members have agreed to work on the ad-hoc. Doug – Subcommittee Chairs and Co-Chairs need to work out the schedule. Pam agreed that they should have input, but that could lead to bias toward certain subcommittees. Doug suggested an email or conference call process instead of an ad-hoc committee. Doug suggested creating options and then polling the membership. Tamara – Is this a template for all future meetings in foreseeable future? Pam – yes.

QAAG Report – Camille Danielson

Camille gave the QAAG report from March 2019. Main topics:

- 1) CAL Readiness Verification Report was approved.
- 2) MDN HAL 2017 QA Report was approved.
- 3) QAAG approved the use of OTT P2-S gage.
- 4) Bromide data issue discussed and resolution presented and approved.
- 5) NTN Bag sampling conversion plan approved.

- 6) Ammonia extraction sample analysis now includes pH matching prior to analysis.
- 7) DMAG is being re-established.
- 8) Amy Mager presented a coding mistake whereby dirt and soot coding is not considered contamination, but CAL was coding as contaminated. Corrections were made to address the problem.
- 9) A long-term NTN Archive Plan was discussed and modified/finalized.
- 10) Precip sensor study – Greg will look for that to put out a data release.
- 11) PTGE bottle study data need to be found and documented.
- 12) MDN evaporation study should be revisited/resolved – probably not as large of a problem with PTGE bottles.
- 13) A database editing SOP needs to be developed with DMAG.
- 14) MeHg will continue at sites currently running it. A modified compositing protocol for MeHg was presented and approved.

DMAG Report – Bob Larson

With the HAL transition, the PO is expanding current NTN and AIRMoN software to integrate MDN. DMAG had one motion: Delete old rule of 1 day with any missing record = use the weekly sub_ppt. Instead, when there is an incomplete record, the data analyzer will use the actual record and fill in missing record as practicable.

CLAD Report – Mike Bell

There were no motions. However, the science behind air pollution was discussed in CLAD. Mike acknowledged the challenge of integrating new Hg Science Committee into CLAD.

TDep Report – Greg Beachley

Greg gave a report of the TDep meeting presentations and outcomes. White Paper is published on NADP web site. Several EM publications coming out plus special issue of STOTEN. A webinar series is being organized where topic leads will present summaries of their topics beginning in August. Will occur ~ 3rd Tuesday of every month.

TDep is now organized into three workgroups. This includes the Stakeholder workgroup that is being led by John Walker. The Measurement Model Fusion workgroup will be led by Greg Beachley and will kick-off sometime this summer. The deposition uncertainty workgroup is a joint workgroup with CLAD and is already being led by Mike Bell. The Stakeholder workgroup is currently focused on the Agricultural Workshop that will take place in Boulder, CO instead of the TDep meeting (Mon, Nov 4th). The TDep representatives to EOS will be Kristi Morris and Chris Rogers.

Aeroallergen Monitoring Science Committee Report – Andy Johnson

Andy Johnson discussed Aeroallergens. The immediate priority is finding a co-chair. Andy gave an update on last week's climate change conference in Atlanta. There has been some reorganizing at the CDC. AMSC had a good discussion on drafting a research proposal on methodologies for pollen counting and using NADP samples. Proposal will be written before next meeting. Greg and Mike talked a little about scope. AMSC wants to work on network design and QA.

CityDep Report – Greg Wetherbee

Greg gave an update on Citydep. Greg is the chair of Citydep. Two sites are in Boston, Greg's sites are wrapping up in January, and we have a site in the Bronx, Madison, Louisville, California and elsewhere

across the country. CityDep members feel a need to for a larger presence at NADP, so that CityDep is more like a real subcommittee versus an adjunct group.

NIFA Report – Karelyn Cruz

Karelyn Cruz gave the USDA NIFA report. We are in good shape with the interagency agreements. All federal agency agreements have been approved except USGS, which is expected soon. The new agreement with WSLH will be a 4-year agreement that is renewed every year with an optional 5th year extension. Karelyn mentioned research opportunities for USDA/NIFA grants as well as competitive conference grants (\$50K). Some restrictions apply to select federal agencies.

Acceptance of the Reports

Richard Tanabe motioned to accept the subcommittee and agency reports. Doug entertained a motion to accept all of the committee and sub-committee reports. Richard Tanabe entertained the motion. Dave Schmeltz seconded the motion. The motions were approved, and the reports were accepted.

Old Business

Excess Funds Still at U-of-I – Doug Burns

Lisa Volk contacted Doug to indicate that about \$34K is remaining in their accounts for Acid Rain 2020. NADP needs to decide how to spend the money by 2020. The best way to spend the money is to pay bills. However, Hiroyuki noted that this cannot be done, so we can use the funds to pay travel expenses for US citizens after the fact. Significant documentation will be necessary for this.

NEON Interaction – Mike Olson

Mike Olson discussed NEON. He met with Mike St. Clemons and he wants to work with us. We have identified NADP and NEON sites. NEON is enthusiastic but burdened by the larger shut down issues they are experiencing.

Mercury Litterfall Network – Doug Burns

USGS is operating the Mercury Litterfall Network out of the NY and WI Water Science Centers. The plan is to transition the analytical part of the network to WSLH. Once WSLH gets a new instrument, they will run many split samples from USGS Mercury Research Laboratory to validate their methodology.

Strategic Planning – Mike Olson

We had a strategic planning session on Monday. It was fairly short and an easy way to organize our thoughts on what NADP's short and long-term plans should be. We will be finalizing these results at 8:30 a.m. tomorrow morning in a draft document. The session on Monday this week was a successful way to start to talk about future plans and goals of NADP, and we need to keep going.

Archive Samples at University of Illinois, PRI – Doug Burns

Doug gave the IL11 sample archive update and distributed the letter that was sent to Susan Martinez. There has been no response to NADP requests for the IL11 samples.

New Business

Doug acknowledged Pam Padgett's service to NADP as she retires. Doug also thanked Mark Olson for his hospitality in hosting the NADP dinner at the Olson farm.

HAL Transition – Mark Olson

Mark Olson talked about the HAL transition progress. The WSLH is on track to take over the program on June 1. PO is redesigning some space at Henry Mall. Mark Olson has accepted the position of HAL Manager. We have a Tekran 2600 up and running, and a methyl mercury analyzer that is in-house. We will be ready to go in a couple weeks. Mark will still be overseeing AMNet in general, but we will need to have someone overseeing audits.

USGS Interlaboratory Comparison – Greg Wetherbee

Greg announced that he is keeping the PRI laboratory (former CAL) at UI Illinois State Water Survey in his USGS intercomparison program because it is high-performing lab with a great history with NADP, and now it is the NEON lab.

USGS Next Generation Water Observing System (NGWOS) - Mike McHale

Mike showed some slides to describe the USGS NGWOS project, which is all about water quantity (and quality to lesser extent), and is intended to feed into the National Hydrologic Model. The National Academy of Sciences challenges the USGS to develop web based tools, among other things, and Mike presented the USGS vision for NGWOS, which is intended to support modern water prediction and decision support systems with an integrated set of fixed and mobile monitoring assets. There might be opportunities to expand NADP associated with this effort.

Executive Committee Voting – Pam Padgett

Pam Padgett (EOS) noted that we (NADP) get to modify the governance document to determine who gets to vote and when. It is one vote per person, and no person gets two votes even if they serve as head of more than one subcommittee.

Mercury Science Committee – Tamara Blett and Rick Haeuber

Tamara Blett gave the Mercury Science Committee update. Multiple Hg monitoring networks operate within NADP, but no forum for technical exchange of information exists. Tamara got a group together to come up with a proposal. This group met to talk about what this might look like. There are gaps in the NADP mercury monitoring networks and disconnect between sources and receptors. The goal is to fill those gaps. Also, efforts to create a committee dovetail nicely into the WSLH activities on mercury research. A subgroup has been formed, and a charter drafted along with a mission statement.

Rick moved for the EC Chair to accept and appoint an ad-hoc Mercury Science Committee which would report back to the EC at the NADP fall meeting in Boulder. Doug granted ad-hoc Science Committee status with Rick Haeuber and Colleen Flanagan as co-Chairs. Doug asked that the ad-hoc committee report on progress and organization at the fall 2019 meeting.

MAP3S Data – Doug Burns

Doug described the history of MAP3S as a precursor of NADP. There is a historical MAP3S data set that Tom Butler has pulled together. Tom would like to see NADP take ownership of the data serve it online. Tom will do whatever is necessary to help make the data available. Bob Larson and Doug Burns will evaluate the data and work with Tom to get it ready. Pam Padgett suggested that DMAG evaluate the

data and advise on posting it to the web site. The Executive Committee was broadly supportive of this idea.

Federal Agency Reports

NPS – Kristi Morris

Tamara Blett's position was filled by Emmie Faulkner. It was a big year (2018) for the Nitrogen Deposition Reduction Plan for Rocky Mountain National Park. The year 2018 was a milestone for comparison of measured load to the linear glide path toward the critical load NADP plastics study by USGS was acknowledged.

BLM – Ryan McCammon

Funding is in place through August 2020 for all sites, and BLM took on part of CO09 site funding. BLM added AK96 AMoN site as well in collaboration with Univ. AK Fairbanks. BLM is continuing to fund NADP through the NIFA agreement.

EPA – Dave Schmeltz

The budget picture for FY19 is fairly complicated. Funds for EPA support of NADP and site support come out of Science and Technology account. Commitment to networks is as strong as ever. CASTNET infrastructure and equipment need refurbishment and will be a priority in coming years. TDep is also a priority.

FWS – Catherine Collins

The USFWS is in a much better funding situation for 2020. Most USFWS sites were not operated during shutdown. Will be working on plan to prevent/limit interruption in the future.

NOAA – Winston Luke

Converted AIRMoN sites to NTN and funded an additional site, plus 1 MDN and 1 Litterfall site. Winston noted that our budgets have been relatively stable but NOAA is moving us into different areas of research. NOAA's site operators are not federally funded, so no operational issues were experienced during the shutdown except for the Mauna Loa site.

USFS – Pam Padgett

Most monitoring efforts are funded through National Forest System side. There was a 50% reduction to monitoring in USFS research. There also will be a \$200K cap on anything we will pay in terms of monitoring.

USGS – Doug Burns

President's budget zero's out NADP for USGS. From a science perspective, USGS efforts might be useful for SPARROW modeling of P in watershed modeling. Looking at trends in deposition with support from Amy Ludtke (USGS retired).

Stakeholder Reports

Maine DNR – Andy Johnson

Support from Maine looks stable and has management support going forward.

Great Lakes Hg Monitoring Network – Donna Kenski

Doug Burns provided a report on behalf of Donna. No changes for MDN envisioned. Flat funding is expected. A new AMNet site at Indiana Dunes has been running for 6 months now. LADCO needs to update Tekran instruments at their sites. Donna is encouraged about an equipment lease program. Donna would also like to rely on NADP return shipping rates.

Environment and Climate Change Canada – Annemarie MacDonald

ECCC will continue to run 5 MDN sites, 3 AMoN sites, and they intend to add 1 more AMoN site. Bratt's Lake CASTNET is having new equipment installed. The AMNet site at NS01 will not continue.

SAES – Rich Grant

Rich Grant gave the SAES update. Several issues will be brought up at the workshop at the fall meeting. Trying to get Ag Exp. Stations recommitted with ammonia emission monitoring. Agriculture is having to deal with the issue on many levels. Rich is working on creating a committee under the Ag. Exp. Station structure.

SAES Directors – Doug Buhler not in attendance.

Motion to adjourn by Pam Padgett and seconded by Richard Tanabe at approximately 3:20 p.m.