

NADP Virtual Spring Meeting 2025

Joint Session I. 5/12/2025 Monday, May 12, 2025, 12:00 PM – 4:00 PM EDT

12:00 Welcome, Logistics, Introductions (Winston Luke)

12:05 Welcome address by Dr. James Schauer, WSLH Director, NADP Principal Investigator

12:15 State of the NADP (David Gay, NADP Coordinator)

12:45 Executive Committee on the status of our 2025 priorities

1:00 2024 PO/NAL audit updates (Noel Deyette)

1:15 Brief recap of Network Optimization proposals (Mike Bell)

1:25 Brief federal agency updates to inform Network Optimization discussions (all)

1:35 Subcommittee Reports – Network Optimization proposals Impacts only

MELD (David Schmeltz/Connor Olson)

TDEP (Colleen Baublitz/Kristin Foley)

CLAD (Jeremy Ash, and Kris Novak)

DMAG (Mark Kuether)

QAAG Update (Nichole Miller)

2:15 Break

2:30 Mapping criteria impacts of 2-Week Composite NTN Samples (Jean Steele, Zac Najacht)

2:45 Focused discussion of Network Optimization proposals, possible alternative proposals (e.g., network-focused, interagency collaboration for site prioritization)

James Schauer: Welcome Address

- Will be retiring from the role of WSLH Director and Professor
- New Director unknown
- Will still be in emeritus status

David Gay: State of the NADP

- Financial: A few good things:
- Inflation has settled down

- As of now, the federal funds are holding; lots of maybes, but federal budgets are currently similar to last year
 - States seem to be solid at this point- have not heard of reduced funds at their sites
- As of today, we are expecting 1.28 million through NIFA- fairly typical
- New Pricing: July 1st-June 30th, 2026
 - 4th of 5th year of Executive Action, +2%/yr increase for 5 years
- NADP Budget: NADP July 1st to June 30th
 - Coming up, looks similar to prior years right now
 - Current budget: July 1, 2024 – August 30, 2025
 - looking good right now- about 45 days left
 - we have a small positive balance- 20k
- NTN 240 sites currently
 - Data in the PO through July 31st, 2025
 - NTN has been similar sized since 2003
 - NTN recent changes: OK24 and OK96 added in August- PFAS
 - Lost: PA13, CAN5, KS32, NY10, CO09
 - MD15 will close on 9/15/2025
 - Potential New sites: NM, NM96, CO22/CO79 (PFAS), MI94, MN06, MN97
- AMON: currently 91 sites, data through January 31st, 2025
 - Has been stable
 - New sites: KS08, FL93, NE98
 - Sites closed: NC98, SK28, NE98
 - Sites coming: Air Quality Management District, Los Angeles- would like to start 10 new AMON sites June 1st – would like to run at least 2-3 years
- MDN currently 75 active sites
 - Data into the PO through January 31st, 2025
 - Slow loss of sites the last few years
 - Recent closings: SCO3, AK02, PA13
 - Opening: NE97 last summer
 - Interest but no movement on starting sites: USFWS, MN05, WA03, NV, new one coming
- AMNet
 - 8 sites
 - Data through January 31st, 2025
 - Currently: AK95, HI00, MD08 will shut down, MD99 shut down in late 2024, 4 GEM and 4 speciated sites

- OH02 long-term investment just made, 8 will likely remain consistent
- MLN
 - Currently 26 active sites
 - 2024 data will be reported soon
 - Has increased over time
- PFN
 - 13 EPA Funded sites
 - 4 NJ funded sites
 - 3 sites through USDA ARS
 - 4 new sites expected
 - 2-year project expected to end soon in NJ and 2 sites will be kept
 - Haskell Indian Nations University etc., want to add site
- Data update
 - Now have on time data through Jan 31, 2025
 - Working much better now, more regular than previously
 - Maps work can begin- earliest ever happened
- Other Notes
 - New for 2024- adding in concentrations in Alberta, Canada to the annual maps
 - added to the web: Annual AMON maps, AMNet figures, annual MLN figures
- Methyl Hg Data Update
 - Getting MeHg data online has been an issue- Mark Kuether is working to release this data on the website in the next few weeks
- Dan Mosier II – retired as site operator from KS07 after 37 years
 - Site started in 1984

Discussion

Winston Luke: What percent of NTN sites are Federally funded vs funded by States?

David Gay: 85% fed

Richard Tanabe: 74%

Mike McHale/ Melissa Puchalski: Executive Committee Priorities (2025)

- **Description of Executive Committee Leadership roles**
- **Voting Members on Executive Committee**
 - Past Chair-Mike Bell (NPS)
 - Chair-Melissa Puchalski (EPA) non-voting

- Vice Chair- Mike McHale (USGS)
- Secretary-vacant
- NOS Chair-Winston Luke (NOAA)
- EOS Chair-Beck Dalton (EPA)/Emmi Felker-Quinn (NPS)
- Budget Advisory Subcommittee Chair-Noel Deyette (USGS)
- SAES representative-Jeff Collett, Jr. (CSU)
- Changes and resignations will be noted/ scheduled
- Priorities- set January 2025
 - Expand the networks through new partnerships
 - Prioritize external communication activities
 - offer guest lectures/ engage with universities
 - set up training through TAMS
- Network Optimization
 - Develop a strategy to reduce network costs to sustain the existing networks
 - Actively apply for grant funding (currently kind of on hold)
 - Develop automated site sponsor lists – engaging with site sponsors
- Next Steps
 - Utilize your knowledge and expertise
 - Maintain sites to evaluate short and long-term impacts
 - implement cost-savings
 - continue to invest and implement network efficiencies
 - Highlight PFN to fill agency research needs (EPA)

Questions?

(None)

Mike Bell: thanks to Melissa for her commitment and keeping us on task.

Mike McHale: Mike Bell has done a good job with the Network Optimization

Colleen Baublitz: Thanks to the PFAS network team for their leadership so that NADP is well-positioned to provide much-needed measurements in this moment!

Linda Geiser: Very nice work Exec Committee! Great organization and worthy priorities. Thank you for your work.

Regarding PFN-- can we please change the name to PFAS so people know what it is. Calling it Puffin is confusing.

Colleen Baublitz: For what it's worth I like the Puffin name! Though I would defer to others who have engaged more externally on it

Mike Bell: NADP Network Optimization

- Mission: Maintain spatial coverage of sites across the contiguous US to maintain long-term trends
- Current Recommended Changes:
 - AMNet: remove speciation system and monitor GEM/TGM only
 - Discontinue measuring MeHg from the Litterfall Network

Few Dissenting comments

- AMNet: remove speciation system and monitor GEM/TGM only
- Discontinue

Reduce analysis of MDN samples from weekly to two-week exposure sample

- ~35% cost savings per site
- reduces site operator cost
- Reduce analysis of NTN samples from weekly to two-week composite sample
 - ~30% cost savings per site
 - Ideally week 1 samples would be refrigerated and then composited with week 2 samples in the field
 - Adds additional steps for site operator and less data for the site
 - A lot of sites would prefer to stay at 1 week
 - Concerns of NH₄ loss from the sample between weeks
 - If sites are shut down as an alternative, concern that they will not be able to restarted/ funded
 - Need additional 1 week vs 2-week comparisons in different places
 - Need additional SOPs for mixed contamination
- Strategic Site closures
 - Ongoing analyses to evaluate impact of site closures on network and interpolations
 - Evaluating a mix

Mike Bell: Important to make these changes with the network as a whole- level of detail is important

- Timeline of changes
 - Dependent on:
 - Budgets/ staffing at agencies
- A concern about data quality
 - “WSLH implements a rigorous QA program that includes internal and external audits, participation interlaboratory comparisons, and formal accreditation.”
 - Do we need more comparisons between 1-week and 2-week samples to have more clarity about the change in uncertainty? Do we do this before, during or after?
- Altered Recommendation
 - Set up motions as an option for site sponsors to move monitoring to 2-weeks for NTN and MDN
 - Decisions will be made by agencies at budget meeting
 - Would need to determine what the minimum number of sites to move to 2-week sampling to make it worth it
 - Allow the max number of sites to maintain standard NADP data

Questions

David Schmeltz: Regarding AMNet, if a sponsor still wants to measure speciated mercury concentrations and cover the associated costs, will the PO/NAL support that?

Vid Grande: I know that I want to continue supporting AMNet speciation with those who want to continue in the field.

Richard Tanabe: Federal agencies account for 70% NTN and 24% for MDN

David Gay: (answering Schmeltz- OH02 asked similar- it does come down to budget)

Cari Furiness: The results of the analyses of removing sites will be presented at 2:45 is that correct?

Winston Luke: Cari that is the plan, but we are running ahead of schedule

Mike Bell: something we need to keep in mind is that part of this exercise is looking to reduce PO costs/ responsibilities and mostly it seems like we are adding work with the 2 streams of analysis. Need to keep in mind all of the factors coming into play. Raise your voice on opinions even if not financially feasible.

Melissa Puchalski: The option to do 2-week vs 1-week- is the thought to – does the PO feel strongly about letting the bills be split by site or all or nothing by a sponsor?

David Gay: Different opinions will require programming changes- the biggest drawback- if that can be done, allowing per agency is doable on the business side. The issue will be integrating it on the business/ QA side.

Richard Tanabe: Working on a talk for tomorrow that goes through the PO and lab – to go over the issues/ options for agencies to go over priority sites

Mark Kuether: With the cost savings with MDN- does that take into account sites with MDN and NTN?

Mike Bell: I think they are PO level not operator cost-savings. At least within the NPS – those are 2 different buckets of money....

Tim Sharac: For NTN – if agency had changes happen quickly- changes to SOPs/ QA/ review process- multiple years of testing- do we have the flexibility to make quick changes? Examples- cut our budget by 30%? Could NADP impalement almost immediately? Or more feasible to cut 30% of the network. Not in favor of changing the whole protocol- doesn't seem feasible. Historically, we have cut sites, looking at siting criteria- 75% have debris in the samples... microbial growth or chemistry changes, understand that not all sites have refrigeration on site.

Mike Bell: frame questions on why we are trying to have these conversations before potential large cuts, planning for this and hoping for better than that.

If we decide to stay status quo- is an acceptable way forward

Mike McHale: In speaking with Richard, it sounds like it is not reasonable for PO to implement 2-week sampling in the next year. So, cutting sites is the only choice. Now, we can direct PO to begin making that accommodation if we could have that in a year/ 1.5 year. Otherwise, this is a moot point.

Is a net cost if not ever implemented.

Winston Luke: Valid point. Making these changes is not trivial. But if sites are cut/ mothballed with 2-week sampling- bumpy but if we have a path to mothball and not cut that would be a good thing to renew.

Mike Bell: Flip flop on what is the right answer

Zac Najacht: What is the number of sites that have MDN without NTN? Very small if I remember correctly.

April Hathcoat: Cherokee Nation is one of those sites... I agree that we are in the minority. OK99

Vid Grande: OH02 is another MDN only

Mary Lynam: MI52 MDN only

Richard Tanabe: 29 (of the 75) sites are MDN only

Dana Grabowski: About 28 sites I think

John Walker: Struggling with NTN 2-week sampling- would be a decision made without understanding of data- 1-1.5 year would allow us to make an informed decision. Need to understand data quality implications for 2-week sampling.

Mike Bell: Tough place to be- need to add money to prepare to lose money – to meet data expectations

John Walker- easier said then done.

Tim Sharac: Making room for growth. NTN history – when some sites are shut down- make room for other growth- not steady state

Mike Bell: consider as if the big budget cuts occur- NTN – make sure we know what we are looking to get from sites – determine what the focus is / how to do these cuts

Colin Kelly: I was thinking. Why doesn't NADP do something like Public Radio does; have a fund drive allowing private public party to donate funds to continue support of sites. Maybe an "Adopt a Site" campaigning or something like that. there are probably logistical hurdles to this, but thought I would throw out the idea. Thanks

Winston Luke: All flying blind- complicated questions- agency updates

Mike Bell: Air quality cancelled – cancellation overturned on gaseous monitoring and back on NPS pages. Positive experience with. Rumor of large cuts this week- there was a judges order to delay RIF plans until at least next Friday- in the worst case scenario. In review by DOI – ready to be funded in NPS for at least FY26... In a way neutral news, and we don't have clarity- things are positive. Hope things will be maintained.

Michael Randall: What is the impact on data quality of shutting down a large percentage of our sites? Is that better / worse than going to 2-week sampling?

Linda Geiser: USFS: Briefly- Aaron Pina in R&D did receive full funding for NADP sites- but lots of hurdles to get funds obligated. Reviews still in progress. Leg work happening to make funding obligation more probable. Very similar.

Zac Najacht: Mike Randall - the impacts include losing some geographical coverage that the current number of sites provide, but strategic selection of the sites that would be closed could potentially minimize this

David Gay: I am concerned about the ability/advisability of compositing in the field for NTN. If week one is over 500mL and so is week two, I guess we will need to send out bigger bottles? How big? If week one is 1L or more (rest is poured off), then Op adds more for second week...Just not sure what kind of supplies should go out and what this does to data. Also, simply the act of opening bottles and compositing in the field introduces opportunity for error and contamination.

Winston Luke: NOAA: Really have nothing new to report- NIFA was moving forward- total funding 50k- in Dept. of Commerce for review. Feeling- either passed in full or cut short immediately- unknown at this time- only 6 NTN and 1 MDN. So minimal impact

David Schmeltz: EPA: Office of Atmospheric Protection is being eliminated. Unknown how this will impact CASTNET. Not sure about the future viability of the program, separate folks on budget vs programmatically.

Mike Bell: That's a good point- NPS is waiting on the contract to be approved/ moving forward- not in concert with the organization folks.

John Offenberg: ORD appears to be on the path to elimination- lateral transfers? PFAS is a high priority going forward- has been heard.

Mike McHale: USGS NIFA contract sent up the chain end of last week- no response yet. Still unknown- usually moves pretty quickly.

Martin Shafer: Concerns that are amplified for PFAS.

Colleen Baublitz: EPA has expressed interest on the role of international emissions, and I think that it's worth emphasizing that CASTNET and/or NADP sites are unique in their utility for evaluating that with measurements

Mike Bell: NADP foundation does allow for non-profit donations- first hurdle of that has been cleared- still significant amount of work.

Winston Luke: Yes, need to get the word out.

Selma Isil: A Go Fund Me page!

David Gay: That was a question from Anita, not David Gay. (about the bucket composition)

Winston Luke: Richard- what number of sites have fridge capabilities?

Richard Tanabe: No idea- and is it a dedicated fridge or mixed use...

Subcommittee reports

Connor Olson: The three changes most pertinent to MELD and just kind of summarize some of the feedback we received.

- Cutting back methylmercury from MLN
- Mae Gustin and David Gay released a paper that summarized methylmercury in MLN
 - Concentrations are generally quite low and relatively constant, and so given the lab effort that goes into analyzing them, I think this is something that was generally more supported.
 - We don't have an exact number for cost, though it will be cost-saving.

- MDN 2-week sampling- there have been tests in the past and will be more in the future
- AMNet: There was a technical note by Mae Gustin that was, if people switch from speciation to GM or THg. They should have a Pyrolyzer if they want to measure total gaseous mercury

David Schmeltz: Emphasize the need for assessing the feasibility of bags and a way to get that on a fast track for MDN.

David Gay: Still haven't received the bags yet, they were supposed to be here already.

David Schmeltz: is data available for the use of bags in MDN?

David Gay: not sure- paper- not a white paper

Christa Dahman: arboretum data does exist

Martin Shafer: We have more recent MDN data from the UW Arboretum that documents the veracity of 2-week collections.

Richard Tanabe: WI31 data too

Mike Bell: Are there known sites/ operators where best case scenario- could we do comparisons? If we wanted to?

Noel Deyette: We trust our operators to do a lot of steps in the field- compositing samples in at least an experimental stage for NTN samples should continue to build our knowledge on the comparisons.

Martin Shafer: While we have good experimental data documenting the generally acceptable stability of NTN analytes in FILTERED samples, I do not believe we have similar data for UNFILTERED samples like would be the case with moving to 2-week samples. Covering the range of samples (with field experiments) with different types/quantity of particles and their influence on stability of the analytes is going to be challenging.

David Gay: test site can continue in WI for MDN

TDEP: Colleen Baublitz

NTN switch to two weeks/ dry bucket analysis/ could be off-putting to agencies

Raised- difficult to reopen closed sites vs moving to 2-week samples

Concerns about site specific deposition

Helpful to maintain a few sites weekly – NPS starting to do this

PRISM- and prospect of discontinuing precipitation- issues with that

- noted rain gages are used to check the precipitation
- using as an alternative/backup- might need to check with PRISM on budget

Discussion

Kristen Foley: comparative analysis for reference is available

Winston Luke: Note there is likely enough opposition against PRISM usage and he agrees with that.

CLAD: Jeremy Ash

CLAD met last week- shared summary document ahead of the meeting. Overall- more support for moving to 2-week over losing sites. Slight majority. Some of the main arguments: difficulty in reestablishing, local stakeholders rely on data as well as losing operators and maintaining the geographic coverage

- N compound stability concerns etc.

Fundamentally CLAD leans to more flexible site-by site basis- history of deposition, class 1 areas, proximity to other federally managed areas.

CLAD perspective on publications- need more info on the maps etc. and better understand implications on CLAD products.

Questions/Discussion

Mike Bell: Majority of folks abstained from voting. Of people who voted- many want more information

Jeremy Ash: changed mind recently multiple times

DMAG: Mark Kuether

- More open questions – not diving as deeply- RT's report will have more as well as Jean's simulation
- Reviewed 2-week simulation protocol
- About 13 samples before a site can't be mapped, about 6 samples for 2-week samples
- Lot of open questions about how the samples are composited

Questions/ Discussion

Amanda Cole: voiced concerns about compositing samples.

Zac Najacht: raised question about composited in the field or lab

Mostly open questions

What does It mean as far as samples are combined

Zac Najacht: I do think like he mentioned RT's summary will have thoughts and concerns on the data side as well as on the supply/programming side vs the data and management side with coding and qualifying moving forward. More to come and more discussion.

Winston Luke: Thanks to you both.

QAAG: Nichole Miller

More interest for more information- sites vs 2 weeks loss. Big picture question.

Refrigeration, providing a mini fridge to sites, compositing pros and cons, the data qualifiers and mapping criteria. Martin talking about concerns with PFAS- filtered vs unfiltered... MDN 2-week sampling- no major quality concerns- 2 weeks if considered valid. Future bag sample considerations for sites that get more rain- examples overflow at sites that get more precipitation.

- No data quality concerns for MeHg – per site per year
- Removal of speciation from AMNet – would be for the best to maintain

Winston is looking at improving GOM measurements

Questions/Discussion

Winston Luke: not quite going as well as planned

Nichole Miller: no larger concerns, keeping data is ideal

Similar to conversations we've started

Winston Luke: If we do go to 2-week composite, I think in order to have this discussion- preferred road map between closing sites and 2-week composite sample. If we decide to composite- how many sites would we need to provide refrigeration for to inform the discussion down the road.

Nichole Miller: Survey to site operators- 158 responses within a week, so may not be as difficult as we think.

John Offenberg: move this to after break- PFAS considerations – ask Martin about consequences- after NTN

Mike McHale: Curious if any of the site operators would bail if refrigeration is required

Mike Bell: Might wait 2 weeks to collect the sample- would all operators collect weekly and stay engaged? So that we can highlight the importance of there work and data.

Richard Tanabe: How you frame 2-week sampling – change in operators at some sites is so high that operators will only go out every other week.

Martin Shafer: There is the compromise option of maintaining the shipping of one-week collections individually to the lab and continuing the filtration (if appropriate) in the lab. Then let lab decide whether compositing is appropriate. This will reduce most of the data quality issues. Won't save as much money, but QA/QC is paramount.

Vid Grande: How many sites are off-grid and potentially unable to even consider refrigeration?

Nichole Miller: Definitely a question to ask

Noel Deyette: Could they simply be given a b qualifier or something similar?

Jim Renfro: Ok, buzzkill...One other big (sad) contingency to think thru is if Fed RIFs & funding cuts happen (say in days), how will that impact NADP organization/ Committees/leadership, field site/equipment. Contingency planning? DEFCON 1 scenario.

Richard Tanabe: Might set up a voting poll

Mike McHale: Are these recommendations worth doing?

David Gay: Good question- save significant- MDN and NTN reductions, AMNet change won't save a large amount of \$- if EPA budget goes away NADP won't have flexibility

Mike Bell: If it turns out we need to – we fear losing sites- reference Jim Renfro on budget- a different scenario that is more dire.

Mike McHale: Another question for David- Martin comparing option- 1 week- lab runs half the samples- is that worth considering? No impact on site operators/ budget for operators?

Melissa Puchalski/ John Offenberg: no savings

Martin Shafer: compositing analytically- I think we're run great risk in the field -PFAS concerns

Amanda Cole: If the agencies are moving forward with similar budgets as last year, there's not a strong need. But it would be smart to do the comparison studies and be able to pivot quickly if budgets change

Cari Furiness: I agree about the risk to compositing in the field

John Walker: Me too

Cari Furiness: Though there are no potential savings to sample shipping with lab compositing

Who can see your messages?

Vid Grande: AMNet is small potatoes in the overall picture, but there are numerous challenges in implementing the proposed change to GEM only that DON'T leave the sites choosing to continue speciation sampling out in the cold. Even if we pass along the speciation data review to the sites, there are logistical challenges to getting the data into the NADP database with minimal review. I haven't been bringing these up because AMNet is small potatoes and the potential savings and challenges associated with the NTN and MDN changes are much more substantial. I will be talking with David Gay about the ramifications I've identified so far so that he can filter them and bring them up in future decision-making processes.

Jean Steele: NTN 2-week sample simulation

- Use existing data to simulate the effects of moving the NTN network to a two-week sample period
- Outputs- changes to mapping criteria, changes in invalidating samples
- Contaminated isn't automatically invalidated
- Initial Results (Mapping Criteria 1)
- What causes changes:
 - Insufficient volume dry sample + valid wet sample = valid wet sample
 - Bulk or undefined wet sample + valid sample = invalid wet sample
 - Contaminated sample + wet sample ~varies depending on chemistry
- Initial Results (Mapping Criteria 2)
 - CUTOFF=90%
 - Small change, mainly due to 2-week samples falling into different years
- Initial Results (Mapping Criteria 3)
 - CUTOFF=75%
 - Sites with most change tended to have relatively low annual precipitation
- Initial Results: Invalidating Conditions
 - Contamination and undefined issues may lead to more invalid samples in two-week model
 - Effect is highly pronounced with undefined
 - From engage or sample volume when not available- a little variation due to weeks at the end of the year – not apt to change a lot

Questions/Discussion

Zac Najacht: Not much to do with this – Mark and Jean primarily to give us more insight – still challenging

E notes code – truly still have those conditions

Consider – Jean talked a bit about historical comparison- now use visible – averages of all historical data points – would be lost with 2-week sampling

Winston Luke: Agree, thanks

Mike Bell: Fantastic, need to better understand the impact on the data produces – questions:

Do you have the total count of valid/invalid?

Regional patterns- which sites are more likely to become invalid with 2-week sample

What percent of sites are arid?

Jean Steele: valid and invalid- originally counts per sample vs duration-based measurement was a bit easier to translate 1:1- can go in more depth if needed

Mike Bell: is each point a site in year?

Jean Steele: Yes. To your second question- map is of how it shakes out geographically same site different years, can compare further.

Mike Bell: Given some of these factors- in an arid site- 1 week and 2 week- is there a count of samples analyzed across the network- starting point of where they are? My history is 6-7 samples/ year vs wet sites weekly.

Jean Steele: Good point- More impact to dry sites- maybe yearly analyzed at dry sites wouldn't change a lot

Mike Bell: Losing more in those situations

Jim Renfro: Great data. No sites east of MN.

Winston Luke: General discussion framework-Network Optimization

Let's start with the least controversial recommendations from the Ad Hoc Committee:

- Not being considered at this time:
 - Removing precipitation QA, using PRISM estimates instead
 - Discontinuing cation analyses
 - Reducing analytical QA in the NAL
- AMNet: Remove speciation system. Monitor GEM/THg only
 - Some support for measuring GEM/TGM only

- Will save money and staff time due to simpler data review protocols (Vid) and posting estimate?
- What if speciation sites (4) want to maintain those measurements?
 - Sites are free to collect speciation data, but PO to provide no data review and QA?
- Some support for replacing Tekrans with mercury passives
- Timeline for these changes?
- Litterfall: Discontinue measuring leaf MeHg in MLN
 - MeHg values are highly variable and low-NAL supports discontinuation
 - Cost-savings estimate?
 - Timeline?

Richard Tanabe: low hanging fruit first

Removing AMNet speciation being considered- timeline and what to do about sites that want to continue collecting speciated data?

Winston Luke: Can we transfer the data review programs to site owners - OH sites will want to continue speciation

Options- don't support or share algorithms and let them do their own QA on the data?

End of the year?

Vid Grande: If we do this- what impetus do they have to stay within the network? If we're not storing their data? Or we charge- \$4300 for that...

Winston Luke: Valid concern

Vid Grande: Of the opinion that it's the opposite that how NADP works- some support for replacing Tekrans with Hg passives- should be the long-term goal pretty close to being implemented- how I see it

Winston Luke: Not much of an estimate of the savings

Vid Grande: I'm not for profit minded – so I've put more time in than I've billed- and how I approach the world.

David Gay: 1- rash of papers – GOM observation is biased

2- effectively the income for the network is doubled by EPA- not sure what they are thinking about that funding and that might make the decision for us.

Melissa Puchalski: Nothing has been done yet- for long-term management of the task order- agree- would move?

Vid Grande: could Hg passive network be higher?

Winston Luke: GOM data are not worth reviewing- Peter Weiss paper- estimate factor of 2,3,4 underestimate. I have to run numbers, maybe a little optimistic. Could be underreported by a factor of 10. I don't know what the OH DEQ/DEP says about that – it's a lot of work to review the data. Make the argument to them about total HG/ GEM only

Vid Grande: Agreement

Elemental by itself does form a good portion- to think about... OH EPA wants to keep measurements going- unknown if they have a handle on – don't want to house the data-phobia about maintaining it – don't know if their desire to continue is reflex/ based on investment- OH52 going again etc.

Richard Tanabe: David- did you invite Kevin Crist?

David Gay/ Vid Grande: yes

David Gay: OH- trying to be responsible- burns too much coal

Connor Olson- GOM measurements – are they consistently lower by a factor of 10. For trend analysis....

Winston Luke: I don't know that we have enough independent data to assess that. Dependent on ozone and water vapor- 1-3 ppb will cause that- bit of a response curve- Peter Weiss could inform this discussion

Vid Grande: The artifact based on ozone and humidity- diurnal patterns, weather etc., not a consistent pattern for this unless you have the data – Fluorine – coastal vs inland, Cl etc. different effects – too much variability to get a handle on without more information

Winston Luke: show of hands? Query OH further?

Kristi Morris- OH only sites with concerns?

Vid Grande: One of two NJ sites did invest in a piece of equipment last year... waiting to see how it pans out- sense is they will want to continue as well. Don't know if they will resist housing data as OH will be.

Kristi Morris: Don't think it's something NADP should continue to publish. NADP will help sites that want to keep the data for their purposes

Richard Tanabe: AMNet gets into the AirMon sphere, and they wouldn't stop at speciation

Vid Grande: How close are we at getting out passive samplers?

Kristi Morris: pilot now- 90-day collection is in

David Gay: Idea- Since we don't have a passive network ready to go- and 1 person speaking for 2 sites that still want to keep GOM and GEM – and EPA is still supporting this- could we kick this can down the road?

As Kristi said- publishing data without a whole lot of confidence- could restrict it like we used to

Winston Luke: good point- will have more data – table this for now? Reach out to the sites that may be interested in maintaining the GEM and talk to sites- not huge cost savings/ passive data

David Gay: the financial side really goes to EPA

Richard Tanabe: I think David's December 31 date to draft a motion and move forward makes sense

Melissa Puchalski: agrees- good spot to get to today- discuss further by Wednesday/ Executive

Winston Luke: Action item for Vid?

David and Vid- push that- feel them out

Vid Grande: In Madison tomorrow and can discuss further with David and RT- some of the snags GEM only with speciating sites participating

Winston Luke: Yes- overestimates GEM at those sites

Any controversy about the MLN MeHg?

Vid Grande: Immediate- before 2025 samples

Winston Luke: What about communicating that plan?

David Gay: Likely an email to site supporters

Winston Luke: Consensus- action item for David Gay

Richard Tanabe: Have 2024 samples been analyzed?

Christa Dahman: 2024-25 still being dried and composited but already paid for – if the \$ has been allocated.

David Gay: 2024 has already been paid for- I think Sarah Janssen would say do it now for 24

Mike Bell: We're not getting much or anything for the MLN sites- save the effort

David Gay: will email site supporters

Emmi-Felker Quinn: MeHg open webinar for site operators to show those collections have not shown a trend analysis for MeHg as a justification

Mike Bell: Agrees- even a 1 pager for the justification

Kristi Morris: I'm looking in original comments for OH

I don't see specific comments.

Mike Bell: Thanks Vid. I think this will be a "is the time savings in the lab worth the data loss?". Any additional information will help.

AMoN- alpha/ radiello comparison testing is underway

Richard Tanabe: presentation tomorrow

Winston Luke: moving to 1 in person meeting per year – may be a moot point

Can consider that later

For MDN: clear consensus we can make the switch to 2-week samples collected in the field- consider overflow and precipitation events become more common. The other question= would it be feasible to have a premium and economy version of MDN (1 vs 2 weeks) pretty reasonable way to go- thoughts?

Richard Tanabe: David ran overflow numbers- can't remember the cutoff line- if we go this way need to decide what the cutoff is= always send a 2 L bottle vs 1L bottle? Cost differential on shipping?

Richard Tanabe: if in a cooler- no change

Zac Najacht : same

Richard Tanabe: 2L same as 1 L bottle shipping

Around \$18 vs \$9 1 L bottle

Jim Renfro: percent of how many bottles would overflow?

David Gay: 10 sites – not a huge number

Martin Shafer: David- pH issue in large volume samples- sense of change to pre-charge?

David Gay: Yeah, need to investigate further- shipping issues- acid over a certain volume – hazardous

Mike Bell: Is the MDN data review process simpler to implement/ track analysis?

Vid Grande: from sample finish?

Zac Najacht: sampling period- on to off, if that's an extended amount of time- b because of pre-charge, field hold time and lab analysis hold time would be significantly different and more difficult to process

Winston Luke: sounds like non-trivial amount of time to make changes- 2-week field collected sample won't generate much controversy. How many sites would convert?

Mike Bell: Assumption- if only data review process changing this would be more manageable by next year vs if more than one would take longer

David Gay: Making this change would essentially make 2 separate networks (with some sites being on a weekly schedule and others a 2-week sampling schedule)

Dana Grabowski: For MDN data review adjusting coding and criteria would still need to be done for hold times. Currently anything above 8 days and 2 hours is automatically a QR of B and 15 days is where the sample is invalidated. So, this will need to be adjusted prior to having 2-week sampling. The last time hold times were adjusted it was a complicated process.

Mike Bell: It sounds like it is reasonable to get this done for one network (MDN) by January 2026 but that it would be a heavier lift to do this for both networks.

Dana Grabowski: Yes, and if you wanted to make it so that each network was both 1- and 2-week sampling that would be even more complicated.

Zac Najacht: lot of time to change and test sets of code. Changes to the field vs lab hold time would be required. You have two options: lots of work for 1 vs 2-week sites or adjust current coding so that 1-week samples are less stringently reviewed (and fall under the 2-week set). This and NTN would still be a substantial amount of time and effort to get it done.

Winston Luke: Time to get Greg Beachley involved in the discussion. all things being equal and potential need to scramble- prioritize implications / PFAS etc.

Priority (NTN)

1. Mothball sites that we prioritize
2. Collect weekly and have the lab composite samples
3. Field composited samples

John Walker: Vote against compositing in the field at this stage.

Martin Shafer: Concerns for implementing a field composite for PFAS is great. Haven't validated holding time in a 2-week composited format anywhere. Besides the contamination, wanting to add more air and PFAS relevant compounds are likely to be more labile. So, moving to a longer compositing period makes that more challenging. Back trajectories and PMF – source apportionment want to pick out weekly collections dominated by events which is more challenging with 2-week sampling. The whole yield with PFAS samples is around 68% across hundreds of samples. Doesn't provide enough temporal frequency to use the PFAS network in a scientific manner. The baseline should be maintenance of current protocols and composite on site would need to be refrigerated on site.

Winston Luke: In the short term if there are budget cuts sites would close. We are trying to determine other potential long-term changes.

Jim Renfro: With NTN 2-week sampling, whether the compositing takes place in the field or the lab, there is the potential for large volumes of samples to handle and the chance for contamination increases. Issues no matter where the samples are composited if larger volume samples.

Greg Beachley Site Prioritization based on TDep IDW leave-one-out (NTN-IDW-LOO) analysis

Get an idea of the value of a site by leaving out the site and seeing it's value from its surrounding neighbors.

Currently two iterations:

1. All sites
2. 'active' sites per December 2024 NADP site status

Compared to Voronoi Polygons

Winston Luke: Lots to consider and many factors, not limited to completeness of data, location age of record, etc. Makes this a difficult process and there is still a lot more to sort through.

NTN 2-week sampling is estimated to reduce network costs by 30%. The cost to long-term data quality seems high, or potentially high. Agencies are not certain what budget cuts are likely to happen in the near future. So many variables, which should be considered together. If agencies are cut 5% or 10%, does that justify risking long-term data quality by changing to 2-week sampling? Also, if the data quality risks are taken and 2-week sampling is pursued, what is the plan if agencies are cut by greater than 30%?

Vid Grande: I'm definitely in favor of moving ahead with the 2-week MDN sampling. I'm not so sure about the mixed network. The complexity of operating a mixed network seems to offset some of the cost savings. Same for NTN.

Kristi Morris: NPS would consider having their MDN sites go to 2 weeks. I believe we are the largest federal funder of MDN.

Mike Bell: comment Hubbard Brook collaborator- precipitation power analysis- said he would be open to helping if standards are set by agency losses – most function

Cari Furiness: Can the presentation be shared?

Andrea Blakesley: haven't seen that compositing idea – would be asking site operators to double work?

Linda Geiser: what happens to mothballed equipment?

David Gay: Mostly left in the field.

Noel Deyette: This does not double the amount of work for an operator if implemented correctly, it will require half the amount of shipping and half the amount of FORF's being sent in.

Andrea Blakesley: It doubles the amount of work per sample. 2 bucket changes per sample, instead of one bucket change/processing/shipping per sample.

END OF JOINT SESSION I.

Participants

Name (original name)

David Gay

Colin Kelly

Winston Luke

Kristopher Novak
Richard Tanabe
Melissa Puchalski
Abby Carr
Rodolfo Sosa Echeverria
Pablo Sanchez
Mike Bell
Weiti Tseng
Noel Deyette
Dana Grabowski
Nate Topie
Cheryl Sue
Katie Blaydes
Selma Isil
Bob Larson
Camille Danielson
Paige Huhta
Rick Haeuber
Da-Wei Lin
Vid Grande
Jean Steele
David Wischnack
Timothy Sharac
Kristi Morris
Connor Olson
Ralph Perron
Chris Bauknecht
Angela Dickens
Nichole Miller
Zac Najacht
April Hathcoat
Kat McKinnon
Kaushlendra Tingi
Jeremy Ash
James Schauer
Teresa Burlingame
Guey-Rong Sheu
Tracy Dombek
Jeff Collett

Rebecca Dalton
Stacy Knapp
Yuan You
John Jansen
Christa Dahman
Cindy Dallmann
Amanda Cole
Johnathan Jernigan
Katherine Ko
John Walker
Andrea Blakesley
Pleas McNeel
Courtney Stanley
Na Zhang
Linda Geiser
Greg Beachley
Michael McHale
Ian Rumsey
Kevin Mishoe
Emmi Felker-Quinn
Yasi Hassanzadeh
Marcus Stewart
colleen flanagan pritz
Martin Shafer
Chris Rogers (Christopher Rogers)
Merrit Kramer
David Schmeltz
Kulbir Banwait
Jayde Alderman
Margaret McCourtney
Jim Renfro
Sarah Nelson
Aleksandra Djurkovic
Walter Ballesteros
Liam Trinhnguyen
John Offenberg
Anne Marie Macdonald
Colleen Baublitz
Rick Artz

Cari furiness
Hazel Cathcart
Dana McCammon (Dana
McCammon)
Kenny Yan
Jason O'Brien
Tom Butler
Michael Randall
Mary Lynam
Casey Lanham
Kristen Foley
Ken Brice
James Kuchta
Hsuan-Yi Chien
Vincent Vetro
Irene Cheng
J. David Felix
Becky Stephens
Ross Edwards
Henry Anderson
Da Pan
Jeff Sorkin
Naomi Tam
Yayne Aklilu
Ryan Fulgham
Nifer Wilkening
Mike Bell (he/his) (Mike Bell)
Alexander Nyhus

NADP Spring 2024 (Joint session II)

Joint II Agenda Wednesday, May 14, 2025:12:30-15:45 PM EDT

12:30 Committee report outs – highlights, motions, regular business

MELD (David Schmeltz/Connor Olson)

TDEP/CityDep (Colleen Baublitz/Kristin Foley)

CLAD (Jeremy Ash, and Kris Novak)

AMSC (Eric Uram)

DMAG (Mark Kuether)

QAAG (Nichole Miller)

NOS (Winston Luke)

EOS (Beck Dalton, Emmi-Felker Quinn)

1:15 Continued discussion of network optimization proposals, implementation, next steps.

Discussion of alternate/fallback proposals to reduce network costs – interagency collaboration to prioritize and protect sites, sites to cut in the face of budget cuts 2:15

Break

2:30 Resume discussions of network optimization proposals

3:00 Nomination of Executive Committee Secretary

3:05 Changes to Agency reps, Committee officers, pilot network advocates

3:15 Voting on network operations proposals

3:35 Fall 2025 Business Meeting (Noel Deyette)

3:40 Spring Meeting and Scientific Symposium 2026 (Mike McHale)

Discussion of motions and prep for committee report outs

- FORF/ lid weight changes- NOS Motion will go into effect January 1, 2026

-sample status hub

NOS Report Out for Joint II

Chris Rogers and Melissa Puchalski updated us on the CASTNET modernization plan and sensor deployment-lots of new developments

- All EPA-sponsored sites now have a Purple Air sensor, and the data are being fed into the purple air database
- Replacing aging O₃ analyzers (want to standardize Teledyne O₃ analyzers across all CASTNET sites) and IT infrastructure
- FP data being submitted to AQS- going back to 1990, integrating FP, PM, data into one system
- Also trying to replace ACM collectors with NCON to aid PFAS monitoring efforts
- New sites- Canaveral National Seashores (FL), Haskell Indian Nations University. Planned Martin IRL site (FL) in summer 2025

- Deployment of Pandora sensors at several CASTNET sites

Jason O'Brien updated us on CAPMoN

- Network is transitioning from 36 to 24-26 sites by 2026, with some sites moving from daily to weekly sampling (budget issues)
- The lab has cleared its precipitation sample backlog, but is still working through air filter pack samples
- Field updates include infrastructure changes, modernization of data acquisition, and deployment of new ozone and PM2.5 analyzers
- The network is also testing an electronic sample history form and continuing LIMS development and testing
- Development of enhanced VINS bag testing – keep contamination levels down
- Evaluating new precipitation sensor grids, methods for analysis of weak acids
- Data and publication updates

Katie Blaydes presented the AMoN and NTN updates

- Addition of new staff, including APhL fellow
- New instrumentation – pursue replacing HACH FIA with SEAL AA500 segmented flow analyzer
- SNIPIT research is on hold- challenges with over acidification, new challenges for TP

Christa Dahman gave updates on MDN and MLN

- MLN database/LIMS design and testing- complete
- MerPAS testing- 1st quarter samples from the passive pilot network received and are being analyzed
- Moved to electronic data packages for mercury analysis

Nichole Miller: We have had better luck with the TP measurements via our ICP-OES instrument. At a good place analytically but on hold currently with lack of samples to test.

(Snipit is on hold- NOS updates)

Katie Blaydes: Snipit/ Alpha samplers

Winston Luke: Believes NOS secretary issue has been resolved

Emmi-Felker-Quinn: EOS

Motions:

1. Add NADP Factsheet to NADP website (updates for 508 compliance)
2. Update NADP governance document with discussed changes to SAES rep., science committee charter renewal, fall to spring, and additional of abbreviation list to web page

Discussion during meeting:

- Newsletter
- Science communication workshop

Mike Bell: Followed up on the charter renewals every 4 years- official renewal document from the science committees- changes is that the annual reports submitted will take the need of the 4-year renewal process. Tries to minimize the work.

Colleen Baublitz: I apologize- for TDep, I missed the TDep Measurement-Model Fusion WG update. At a high level, Greg Beachley introduced the new APHL UW fellow, who is working on a data imputation protocol for missing observational data. He also discussed updates in TDep v2025.01 which involve re-aggregation of EQUATES simulations with improved inverse distance weighting, based on Kristen Foley's correlation analysis. Greg also presented analyses that he and Mike have developed to try to inform site selection for the network optimization exercise.

TDep MMF update from Colleen

Proposal to stop MeHg on MLN 2024 data moving forward

Noel Deyette: PO/NAL Audit Updates

- Audit Review Team:
 - Ryan McCammon, U.S. Geological Survey (lead)
 - Sarah Janssen, U.S. Geological Survey
 - Yongqiang Liu, U.S. Forest Service
 - Brian Izbicki, U.S. Forest Service
 - Michael Butler, EEMS
 - Kevin Mishoe, WSP
 - Tracy Dombek, RTI
 - Noel Deyette, U.S. Geological Survey
- NAL Findings Updates
 - All findings and recommendations have been addressed by the NAL/PO and are either in progress or complete, including the following findings at the NAL:
 - 1. Cross training of staff continues within the NAL

- 2. Room for improvement between software systems (BenchChem/LIMS, OnBase, etc.) will require coordination between IT/IOS departments and the timeline is up to them. The transition to Horizon would separate the workflow further (this is an ongoing process for 2025).
- 3. Need for additional staff working on QA: Nichole's role has expanded to include the NAL and PO. Discussion of additional staff working on QA is ongoing and may include QA staff from the Trace Elements Clean Lab/hiring a QA APHL Fellow
- NAL MDN/MLN Findings
 - 4. During the audit one of the "polybag" MDL mailers and internal sample bag were ripped. Recommendation to look into reinforced envelopes to prevent sample contamination or loss. Action: This is a rare occurrence. Monitoring will continue at this time.
 - 5. Recommended removal of MeHg for the MLN analysis which is challenging and only accounts for 0.1-0.2% of the total Hg measured and can be easily contaminated. The NAL and PO agree and will bring a motion to remove MLN MeHg analysis to the Spring 2025 meeting.
 - 6. Additional discussion is needed regarding the re-packing of MerPas units, performing maintenance on the Nippon, and ensuring staff have the resources and support needed.
Response: Pilot Mercury Passive Network (MerPAS) began December 31st, 2024, and includes quarterly sampling.
- Data Review Findings
 - 7. Improving the current API code to include and improve the Findability, Accessibility, Interoperability and Reusability (FAIR) data policy. Delivering data to researchers with a higher level of control on downloads.
Response: Updates are in progress to the API functionality- anticipated completion Spring/Summer 2025.
 - 8. Scraper tools and multi-site data selection capabilities. API scraping is available upon request and users can download all sites and filter. IT is possible for OIS to develop an API that handles multiple SiteID values but would be time consuming to update.
Response: The NAL and PO agree this is a possible route to handle data and await further direction from the Executive Committee. These tools would involve the OIS and UW web development team and Casey Lanham. Currently users are advised to make a call to the API for each site that is needed or utilize the data request form on the website for additional ranges of data needed. Anticipated direction: Spring/Summer 2025

- Data Review:

- 9. Preliminary data availability: Scientists may need preliminary data with short latency for event-based investigations (such as wildland fires and assessing impacts on air quality). Multiple factors impact the validity and reliability of the data, including sampling period dates, incomplete data, contamination, historical comparison, etc. This would require a substantial change in how the program historically handles and reports preliminary and NADP PO reviewed data.

Response: NAL/PO agree this is a possible route to handle data and that a larger discussion within NADP is needed. Currently, site operators, supervisors, and funders are provided preliminary data reports based on monthly datasets. Event based reporting has communicated with the involved organizations and the NADP PO.

- 10. 90-day TAT goal from the month in which the samples were received. Work is also ongoing to publish precipitation data separately from overall sample data from the website prior to when completely reviewed data is available.

Response: 90-day TAT goal anticipated by March 2025. Discussion with the analytical team to keep a log of current data sets in LIMS. Data team is reviewing a monthly data set the “old” and “new” way to ensure there are no significant differences. Has been discussion in the Executive Ad Hoc group that one consideration would be to reduce precipitation quantity monitoring with the rain gages- rely instead on PRISM and other sources of precipitation for the deposition modeling and maps.

Direction from the Executive Committee is requested.

- 11. Expansion of NADP visualization tools to assist data selection and analysis for users. Historically NADP has been for data publishing and not analysis. This would be a heavy lift and a need for clear direction and feasibility/timeline would be needed as well as additional staff.

Response: NADP has not performed any interpretation or data manipulation in the past. Currently, the NADP PO does not have the resources or expertise to provide these tools. The NAL and PO await further direction from the Executive Committee.

Will be expanding current graph selections to include AMoN and AMNet figures and maps. Building new infrastructure will take time.

Anticipated direction Spring/Summer 2025

- 12. Data availability statement was updated to not include a year (so that as annual data is available the year available does not need to be updated on the website).
- IT Resources and Systems
 - 13. Current development efforts are being hindered by the lack of a clear timeline for transition to a new LIMS. A plan should define which functionality of the current VB.net LIMS will be handled within the new LIMS and which parts will be migrated to a new Java (Spring) application.
Response: Discussion with the WSLH OIS Horizon team has begun to confirm capabilities between the current LIMS. It is known that the precipitation and field components will not migrate well to Horizon. Further discussion with OIS is needed to determine a timeline.
 - 14. 2022 finding that AMoN data are not downloaded from a static database table- currently in production.
Response: The dynamic web data was ported to the static database table on 11/11/2024. Webpage was updated to draw from the static database table 11/12/2024. Samples will be retroactively reviewed and edited after publishing. The August data set will be the first fully static data set and are expected to be available by the end of February 2025.
- Recommendations:
 - All other comments were recommendations and have either been addressed or are in progress.
 - One recommendation was that the NADP community/EOS/students work on making a video explaining what happens to samples after arrival at NADP to engage with the public and site operators.
 - Overall, the audit team appreciated being shown how systems functioned and providing insight for improvements to procedures and training.

Discussion

Mike Bell: Thanks Noel and the audit team and the lab for walking them through everything

Motions:

Remove methylmercury as an analyte of Mercury Litterfall Network, effective for the 2024-2025 litterfall season. The PO/NAL will communicate the rationale for discontinuing the analysis of MeHg in litterfall to current MLN sponsors and operators.

Explanatory: This motion is proposed with the advice and support of the 2024 external lab review group and the ad hoc network optimization group. The analyte is challenging to recover at concentrations found in litterfall, accounting for ~0.1-0.2% of the total mercury in litterfall. The method is costly to run, the samples are easy to contaminate, and the data have minimal utility in assessing mercury deposition from leaf litter. WSLH will continue to offer methylmercury as an analyte for non-standard analysis.

Updated verbiage:

Motion: Remove methylmercury as an analyte of Mercury Litterfall Network, effective for the 2024-2025 litterfall season. The PO/NAL will communicate the rationale for discontinuing the analysis of MeHg in litterfall to current MLN sponsors and operators.

Explanatory: This motion is proposed with the advice and support of the 2024 external lab review group and the ad hoc network optimization group. The analyte is challenging to recover at concentrations found in litterfall, accounting for ~0.1-0.2% of the total mercury in litterfall. The method is costly to run, the samples are easy to contaminate, and the data have minimal utility in assessing mercury deposition from leaf litter. WSLH will continue to offer methylmercury as an analyte for non-standard analysis.

Mike Bell moved the motion effective for the 2024 litterfall season

Seconded by Melissa Puchalski

(82% voted yes, motion passed)

Motion for AmNet:

The NADP AMNet program will discontinue support of Tekran speciation measurements on July 1st, 2025. The PO will provide the AMNet speciation sites with the data validation program for the GOM/PBM measurements were discontinued on 7/1/2025 and the data provided include a known bias.

Vid Grande: External database reference should be included.

David Gay- State OH still runs 2 speciated sites and needs the data to be available online- be available through a link for the site specifically. I would be fully supportive doing that if Exec agrees. Good client

Richard Tanabe: Who will manage that?

David Gay: Up to them to put there and to attach metadata to that data just like the other networks

Richard Tanabe: Who is expected to handle that- PO?

David Gay: Ohio

Richard Tanabe: Where is the data being stored?

Providing a link to their data

David Gay: compromise

Richard Tanabe: Link to their database

David Gay: yes

Mark Kuether: labor involved? Still part of it

Richard Tanabe: I don't know that it'll be the same as Guey-Rong and expecting/ populating that excel database

David Gay: yes, that was my idea- I think OH02/OH52

Richard Tanabe: I don't know that that needs to be part of the motion – tying our hands to further support to something we're trying to stop. I understand having a link to their data.

Melissa Puchalski- Add those details?

Mike Bell: How is the Taiwan data? Is this something we can also say...

Richard Tanabe: New- Taiwan provides us with a file at the end of the year to add their data to the annual summary- no link

Mark Kuether: MLN data links to USGS their data on their website

Richard Tanabe: That's past data

Mark Kuether: static link- this would involve updates to the background files unless to a dynamic page.

David Gay: Didn't get the dynamic impression from OH – to be able to say here's our record

Mark Kuether: Not a big deal, but we would still have a hand in it

Vid Grande: Expects to be involved directly, but not under the auspices of NADP- One of my tasks coming up to get the data to them so that they can process their own data. Summary of data like Taiwan- spreadsheet form or what is a good question. We're talking 6 weeks to figure out the details. Not just the Ohio sites, but the NJ sites- new equipment last year

Would also affect Taiwan as well.

Mike Bell: click on a site- tab- documents on i- could link ongoing speciated data?

Richard Tanabe: If you click Taiwan in export widget does link you to Guey Rong ...

I don't think we need to include that in the motion. We can provide a link on the website, I don't think that's a high priority for us- other things in the next 6 months will take a higher priority

Winston Luke: how to adjust the motion

Richard Tanabe: The motion as written...

Winston Luke: Just state the data will be accessible

Richard Tanabe: Don't include- stop at bias

Mike Bell: David and Vid- given that you've had communication... what do they need

David Gay: Kevin Crist- OH02 coordinator – he was a bit alarmed when he heard we were doing this- OH EPA doesn't like the decision, but they understand- Bob H- gets some of the US EPA funds – they have a need for it to reside on the web. I said I'm sure we can figure out a way to make this happen – like Taiwan/ IL. I'm in agreement with RT that it doesn't necessarily need to be in the motion- background to make everyone happy

Martin Shafer: If the website alerts users of a known bias in the GOM/PBM data, then further explanation of that bias should also be provided.

David Gay: We would write a 1-pager to give to people with further notice. We will keep the speciated data that we have on the website on the website.

Winston Luke: Okay, I'm fine with that. Is everyone happy with the motion as it currently reads?

Vid Grande: No problem with it now- will let you know...

Melissa Puchalski: Made up July 1st- can change

David Gay: Suggestion- Taiwan contract through the end of the year. Not sure when the OH contract ends

Mike Bell: Worth give them through their contract

Most states July to June- Angela Dickens

Winston Luke: By XX date- can we solve / resolve that?

Vid Grande: Don't renew any AMNet speciation – so end of current contract period- and they would have to send in their new fee...

Mike Bell: By the end of – so if EPA has the other sites can stop that immediately if we want to...

Winston Luke: by the end of the current site contract?

David Gay: at the discretion of the PO?

Winston Luke: Included as an add on to the sentence- at the discretion of the PO...

David Gay: Won't go past that

Richard Tanabe: Go until June 30th looking at the shipping.

Mike McHale made the motion seconded by Melissa Puchalski on GOM/PBM measurements.

Motion: The NADP AMNet program will discontinue support of Tekran speciation measurements by the end of current site contracts, at the discretion of the Program Office. The PO will provide the AMNet speciation sites with the data validation program for the GOM/PMB measurements. The website will include a statement that alerts data users that the GOM/PMB measurements were discontinued in 2025 and that the data provided include a known bias.

David Gay: All 3 sites run through January 1st

Mellisa Puchalski: NJ through end of June- Chris/David- same?

Chris Rogers/ David- July 8th...

Winston Luke: language as is for max flexibility

Melissa Puchalski: Did exchange emails with the NJ group- ok with this and look forward to working with Vid to validate their own data.

Vote: Richard Tanabe: motion carries – 75 of 75 participated (64% voted yes)

Winston Luke read the motion:

Mike Bell- break? Resume at 2:30

Motion: Approve the option to transition from 1-week MDN collection to 2-week collections at a subset of sites beginning January 2026. The PO and NAL will implement changes to the sampling and data processing to accommodate 2-week samples.

It is recommended that additional 1-week versus 2-week comparisons occur at a subset of sites during the transition phase. The PO will continue to pursue the option for bag sampling in the MDN. Data from the sites operating on a 2-week sampling schedule may be released on a delayed schedule to allow the PO to update the data validation process (e.g., notes codes, flags and sample frequency identifiers).

Winston Luke re-read the motion and adjusted

Richard Tanabe: January 6th deployment

Mark Kuether: AMoN schedule

Richard Tanabe: AMoN December 30th changes

Mike Bell: Where would it map?

Mark Kuether: Can make an exception for a transition year- the

Mike Bell: The mid-point of that ... beginning January 2026

Mark Kuether: Possibly

Mike Bell: one hesitation- Christmas break? In theory – but

Winston Luke: if we go to the – well, good point- if we go to the end – would be January 13th

Kristi Morris: if anything vacation time

Mike Bell: Yes, less work beginning the new year. Yeah, keeping it on the same schedule as AMoN- not sure if we do AMON / MDN comparisons

Zac Najacht: easier for operators

Mike Bell: will have 1- and 2-week weeks

Richard Tanabe: Lab staff then receiving all at the same time

Zac Najacht: We thought of that- still will trickle in- to be seen

WHO? Are we going to be in sync with AMoN?

Mike Bell: subset of sites

Current sites and highlighting what we are maintaining by not losing the sites. Might be useful to get a sense of where these are relative to the rest of them. Maybe that will help.

Mark Kuether: What I've been hearing before- try the 2-week data close to 1-week data for validity- don't see why we couldn't combine the 2 sets in a single map

Mike Bell: Should consider adding a separate map to give a sense of uncertainty in the maps?

Richard Tanabe: could offer both- the 1-week to 2-week and if we combine the 2- 1 week coverage as regular colors, 2-week as more of a washed-out color- area represent

Mark Kuether: Can't promise I can pull that off- I will give it a look

Mike Bell: I feel like a lot of that is- and one of the things we talked about yesterday was the awareness that sites that move to two weeks may have an initial delay in the processing- hoping to Horizon/ OIS or whatever complication... Should we note in here any sites wishing to join this must join at the beginning of the calendar year- not being a mixed year sampling style?

Yeah

Mike Bell: Any sites wanting to be included transition evaluation...

Martin Shafer: Will we offer a discounted site rate?

Mike Bell: Anticipated 30% savings

Martin Shafer: Do we want to encourage that in the motion

Mike Bell: Will discuss more in Exec.

Chris Rogers: Should direct... IDK why we'd set it as a set of sites...

Mark Kuether: Be careful not to sound like it is all sites

Chris Rogers: Presenting it as an option- I don't know why we'd limit it to a subset of sites- seems NPS won't be the only ones to do this- seems like MDN direction could be 2 weeks

Winston Luke: Goal not to inundate PO across the network- use this period to ascertain some of the results

Chris Rogers: That's fine

Mike Bell: I see your point- if known as a discount and not offered to everyone

Richard Tanabe: I think that's taken care of- subset any sites wanting to...

Kristi Morris: Want to say pilot? Otherwise might want to communicate to all sites this is an option/ or anyone that wants to participate?

David Gay: Clarification would be good

Richard Tanabe: If we say anyone wanting to be included in the pilot

Winston Luke: Must notify PO by a certain date?

Mike Bell Must sample for a full calendar year

David Gay: Beginning in January, 2026

Winston Luke: December 30th?

Mike Bell: Either way, committing to a year of measurements

David Gay: January 13th, 2026, as an off date

Martin Shafer: Participation subject to approval of the PO? If you want to have some, say of sites and the number that can participate?

David Gay: Rather clarify the motion- know at least 2 federal agencies and some states likely to run on this

Martin Shafer: Then we potentially run the risk of overwhelming the NAL and the PO? Say half the sites in the network want to do this?

David Gay: to be clear – easier if all sites are the same

Winston Luke: This is coming up and the NAL and the PO have a lot on their plate- stretched thin as they are, could be a really heavy lift

Zac Najacht: Want to give Casey's input- this could have some delays when the data comes out for the 2-week samples- but handling of the samples when they arrive- Casey any comments?

Casey Lanham: We are kind of in a transition period here. In July we will be doing a full review of NADP systems- but it might be a little bit difficult to balance adding this functionality to the new systems, adding to a new system and having Zac's team have the bandwidth to handle this- might be a bit much to start by next year

Chris Rogers: 2-week is valid now?

Casey Lanham: Notes codes updating- lots of seemingly small changes that add up until we have to test and change and test and change to make sure everything is working ok-

Mike Bell: Site approval- due to limitations in NAL resources- the initial pilot will be limited to PO authorization?

Winston Luke: sites will be admitted to this evaluation pending review/ approval by the PO

Mike Bell: make it clear limited resources in doing this- To Casey's point- Chris said- if we just put them all in as a different sample type- never mind

Richard Tanabe: Is it not possible that even if 2-week samples- log in- export those samples and do whatever is available- that part of it can be handled at the data entry level...

Chris Rogers: Right, just a matter of handling and post-processing with the understanding that there will be the option to delay with budget – agencies need this option, probably yesterday. If you do one site- not that big of a lift between 1 or all. Trying to limit this to make the data management side of this doesn't make sense.

Richard Tanabe: Add third sentence...

Winston Luke: Yeah, will cut and paste

Richard Tanabe: so that if NPS / other sites will understand that as well

David Gay: will make painfully obvious

Zac Najacht: agree- with Chris/ points- want to make it obvious on the timeline- new programs and that testing – so we are able to get logged in and analyzed in a reasonable time

Katie Blaydes: 12/30 is an AMoN switch out KM: Everglades FL11 is NPS too

Chris Bauknecht: Approve the option for sites to transition from 1-week, etc...

Kristi Morris: Not expecting programs set up by Jan 1 – just know that the sampling schedule is out- not the expectation ready by Jan 1, 2026

David Gay: IT's really what we have to do by Jan 1, 2026, is ingest the samples- then we would have months to get the data

Kristi Morris: Folks sign on to this and know this is a learn while we go and are willing to participate in that capacity

Zac Najacht: Yes, steps moving to Horizon- ingesting the samples- that's where Casey's input comes in. Want to make sure we can do that when the samples start coming in

Dana Grabowski: Chime in about the sample hold times- if we want to get the data out come January and don't have the notes codes and hold times- could still apply the current coding that's for 1 week to 2 week- wouldn't be invalidated

Zac Najacht: agrees

Kristi Morris: agree- what I had in mind ingest as you have

Mark Kuether: Data review – that would be the web review process is flexible enough that if it was coded wrong – as long as there is a clear note, I can make adjustments in the web data.

David Gay: I would like to ask – Stacey Knapp- ME- what is the States perspective/ Angie Dickens- what are the States going to say about this?

Stacy Knapp: We are hoping to afford to keep running as usual and wouldn't want to transition to 2-week unless it was determined 1-week isn't necessary. We are out there anyway- 30% cost-savings is nice but wouldn't break the bank for us. Could switch if it's determined...

Angie Dickens: Directly with Hg – the caveat- questions about state funding- MI would say carry on- IN is a wild card- lots going on with funding- under normal circumstances would stay with 1-week- hard to predict- guessing IN is still a wild card

David Gay: Do we think States would appreciate the flexibility?

Angie Dickens: States are never rolling in lots of money- they might go for it- hard to know.

David Gay: thanks for the State perspective

Winston Luke: going to eliminate the words describing a subset of the sites and caveat

Jim Renfro: Minor comment on 3rd sentence. Exempt TN12 (seasonal sites) to not commit to full calendar year. edit could be "Any non-seasonal sites..."

Mike Bell: Kind of inherent we will review preparation for this change at fall meeting- in the following meetings etc. – if no need for this- could be handled at the fall meeting

Zac Najacht: Fall will give us based on our July 5 3-hour sessions – better idea of where we're at and will be going

Winston Luke: Wants a sentence at the end about sites participating will receive a cost-savings?

Jason Lynch: Motion should acknowledge there is uncertainty in data quality- not a typical schedule- no duplicate sampling that was done- we are moving into a territory where data quality may not be as good

David Gay: Christa Dahman has been doing some measurements- there will be some

Winston Luke: Say effects of this transition on data quality are uncertain at this time?

Jason Lynch: I think that's good

Richard Tanabe: Going back to Chris Rogers point- direct the PO what the cost is by the 2026 budget meeting or something like that

David Gay: Agrees – guess I will need a live with price by January 1- yeah that's all doable

Martin Shafer: change sentence

Chris Rogers: Mark- impacts on maps in this

Mark Kuether: wait on that- that falls under the implied

Richard Tanabe: 2027 problem

Zac Najacht: What happens if all sites want to do this- 30% reduction

Mike Bell: supply change

Anita Peterson: need a month- QC new 2 L bottles

Mike McHale: don't want to change the motion- reasonable if every site wants to suddenly go to 2-week sampling- purchase 2L bottles

Winston Luke: do we need to get to that level of granularity?

Mike McHale: just in case there were a ton of them

Martin Shafer: decision on costing at the budget meeting

Richard Tanabe: Date need to notify the budget

October 1st?

Chris Rogers: September 30th – just for this year- or a year from now- 2027

Motion: Approve the option for sites to transition from 1-week MDN collections to 2-week collections beginning January 13, 2026 (sample off date). The PO and NAL will implement changes to sampling and data processing protocols to accommodate 2-week samples. Any non-seasonal sites wanting to be included in this pilot evaluation must notify the PO by September 30, 2025, and commit to a full calendar year of two-week sampling. Data from the sites operating on a 2-week sampling schedule may be released on a delayed schedule to allow the PO to update the data validation process (e.g., notes codes, flags, and sample frequency identifiers). Effects of this transition on data quality are being evaluated. PO is directed to determine the 2-week sampling network costs by the 2025 Budget Committee meeting. Pending the evaluation of data and operations, this option may be offered in subsequent years.

It is recommended that additional 1-week versus 2-week comparisons occur at a subset of sites during the transition phase. The PO will continue to pursue the option for bag sampling in the MDN.

Tim Sharac: Intention to transition or pilot?

Mike Bell: Transition

Mark Kuether: bags might help this not be necessary

Mike Bell: hope – 1 year of savings and then bags = same savings

Mike Bell: Moved to approve the motion

Seconded by Jason Lynch

Any additional discussion?

(None)

Vote: 100% participation, 72% voted yes, motion carries

Mike Bell: Thank you all for making that better

Winston Luke: worthwhile discussion

Nomination of Exec Secretary:

Mike Bell:

Motion: Nomination of Executive Committee Secretary

- Dr. Dave Felix
- Associate Professor at Texas A&M University Corpus Christi
- Student of Emily Elliott- last NADP academic Executive

Open the floor to additional nominations

Mike Bell: Move to nominate Dave Felix

Winston Luke: second

100% voted yes

Winston Luke: NOS secretary nominee- Nate Topie

Motion: Nominate Nate Topie (WSP) as incoming NOS Secretary

Winston Luke: Motion: Nominate Nate Topie (WSP) as incoming NOS Secretary

Open the floor to additional candidates/ consideration

(None)

Winston Luke: Moved

Mike McHale: Seconded

100% voted yes

Winston Luke: Staffing changes and uncertainties- added to the agenda discussion on changes to agency reps/ advocates for the pilot networks

Winston is retiring- will email information- NOAA rep will devolve to Howard Diamond- he will not be participating to the extent Rick and I have- he will move money through NIFA- site support- but not attending these meetings

Mike Bell: now NPS

Kristi Morris: MerPAS- Colleen? Taking over – keeping track of the pilot study- didn't specifically discuss her being an advocate- or leaving Dave Schmeltz...

EPA- unsure of roles on committees- PFAS pilot – several folks have retired

USGS- Noel Deyette / Mike McHale

Fall- Madison? Or virtual

Spring 2026- Mike McHale: same no commitments at this time

Winston Luke: Leaving NOAA end of August

Thanks for the dedication!

Motion to adjourn: Melissa Puchalski

Second: Mike Bell

Meeting Adjourned

Participants

Name (original name)

Abby Carr

Aleksandra Djurkovic

Amanda Cole

Andrea Blakesley

Angela Dickens

Anne Marie Macdonald

April Hathcoat

Bob Larson

Camille Danielson

cari furiness

casey lanham

Cheryl Sue

Chris Bauknecht

Chris Rogers

Christa Dahman

Colin Kelly

Colleen Baublitz
Connor Olson
Courtney Stanley
Da-Wei Lin
DANA GRABOWSKI
Dana McCammon
DAVID GAY
Emmi Felker-Quinn
Eric Uram
Greg Beachley
Hazel Cathcart
Hsuan-Yi Chien
Ian Rumsey
Irene Cheng
Jason Lynch
Jason O'Brien
Jayde Alderman
Jean Steele
Jeff Collett
Jeremy Ash
Jim Renfro
John Offenberg
John Walker
Johnathan Jernigan
Kat McKinnon
Katie Blaydes
Ken Brice
Kevin Mishoe
Kristi Morris
Kristopher Novak
Kulbir Banwait
Linda Geiser
Marcus Stewart
Margaret McCourtney
Mary Fauci
Mary Lynam
Melissa Puchalski

Merrit Kramer
Michael Randall
Mike Bell
Mike McHale
Na Zhang
Naomi Tam
Nate Topie
Nichole Miller
Nifer Wilkening
Noel Deyette
Pablo Sanchez
Pleas McNeel
Ralph Perron
Rebecca Dalton
RICHARD TANABE
Rick Haeuber
Rodolfo Sosa Echeverria
Ryan Fulgham
Scott Riley
Selma Isil
Stacy Knapp
Timothy Sharac
Tom Butler
Vid Grande
Vincent Vetro
Weiti Tseng
Winston Luke
Yasi Hassanzadeh
Yuan You
Zac Najacht