DMAG FALL 2026 MEETING MINUTES

(October 5, 2026 01:00 – 02:30 PM Central)

Attendees:

- NADP: Mark Kuether, Zac Najacht, Liam Trinhnguyen, Dana G, Kat Mckinnon, Nichole Miller, Christa Dahman, Casey Lanham & Sarah Benish
  - Noel Deyette (USGS), Jess Trevino (USGS), Amanda Cole (ECCC), Tim Sharac (EPA), Jayde Alderman (WSP) & Anna Hyland (WSP)

Status Review

Data Review

NTN Data Review SOP:

- Liam has made improvements to Jeans SOP, including code updates. Mark, Liam, and Zac plan to review Liam's updates after the fall meeting. Since Liam's position is temporary, it may be necessary for Zac or someone else to work with Liam's code for NTN review. It's important we have someone who feels comfortable using this code so the review work can continue after Liam is no longer at NADP.

Staffing update:

- Liam's fellowship continues to be split between NADP and EPA TDEP projects and tasks.
- NADP will have a new APHL intern this summer to assiste with NADP Sample Receiving and PFAS operations.
- Rachel Mallum was hired as part of the NADP Sample Receiving team in July to replace Cami Ritonia. Rachel formerly worked with the PFAS group, and will also work as an intermediary between the two groups.

Other Efforts:

- MDN metadata has been updated to reflect the two week collection protocol.
- NADP PO has bolstered it's process for deleting duplicate samples (caused by duplicate forms). This involves logging the deletion so we are aware of it should a question arise in the future.

NTN Process Updates

Field Form / OCR Updates:

- NTN field form (FORF) updates are live. Those include removal of the manual precipitation section, changes to the lid weight section, and formatting to facilitate OCR operations.
- MDN field form (MOF) updates are live. Those also include removal of the manual precipitation section, and formatting to facilitate OCR operations.
- OCR is still currently in test. Naviant, OIS, and NADP are continuing to work through the testing phase and final steps for implementation.
- The new NTN field forms appear to be working well with OCR.
- Plans for comparisons between the legacy data entry workflow and the updated OCR workflow are in progress.
- Applying OCR workflow to MDN is to occur after NTN OCR workflow is established and tested.

MDN Updates

Validity of contaminated samples:

- The NADP PO data team felt that the MDN data and web review processes for invalidating contaminated samples was a little unclear. They felt the process would benefit from additional guide lines, similar to NTN. Internal discussions focused on visible debris and high analytical values as recorded in the Data Review program.
- The NADP PO data team brought the issue up at the QAAG meeting. The QAAG group agreed that additional guidelines would be beneficial.

- The first step would be updating the NADP Data Review application to highlight MDN samples where the concentration was above the 90th percentile. This would alert the data reviewer that additional review may be warranted. Notes added by the data reviewer would aid in confirming sample validation status. The presence of these high concentration samples would also be communicated to the data manager /web reviewer so they could double check values and were aware of a sample that may be flagged by the controller at the end of the year.
- Internal NADP PO discussions raised other factors such as sample volume and deposition, the frequency with which these situations occur, and the type of debris that are typically associated with invalid samples (i.e. insect / animal / bird droppings).
- The final validity determination of questionable samples may rely on the input from the Mercury analytical team/TECL (currently Christa).

PFN Updates

Current Status (as of the DMAG meeting date):

- The PFN team had finalized the final report format for the weekly data download, and had completed the metadata. The first data set (April 2026) was released on Sep 30th and is being reviewed by the web reviewer / data manager. The data manager is testing transformation logic, database table structure, and API code against the live data set. Some issues have been identified and are in the process of being corrected.

Web Page Progress:

- As of the DMAG meeting data, the Web page was mostly completed and awaited final api and web code updates. Even without the api and web code updates, a static web page will be presented as soon as the data is ready. The monthly data and site lists will be provided by a static link. Metadata for the data will also be available as soon as the data is ready.
- The web page will have features similar to NTN, but not necessarily the Site pages.

Planned Data Products:

- The accessible data reports and lists for PFN will be backed by a web API similar to our other networks.
- From the web site, the PFN network will have a weekly data download, a site listing, and an interactive map. The weekly download data will be "sequestered" by default with concentrations and fluxes for invalid samples or invalid analytes hidden. Like NTN, the web page will have the option to disable the sequestering to display all data available. Metadata will be available via link like other networks.
- Annual PFN aggregations or summaries are still being discussed.
- Annual summary maps or charts for PFN are still being discussed.
- The SOP for the Analytical portion of PFN has been completed. The web review SOP is not completed.

AMoN Updates:

- A small number of amon samples following the change from Radiello to Alpha had the incorrect sampler type. Deposition and rate calculations have been recalculated and updated on the web for these specific samples. Aside from this, the data process remains relatively static due to the identical nature of the process.

MLN Updates:

- No updates for MLN at this time.

Web Updates:

- Mark and Nichole are now managing the web site together. They have taken over Richard's primary duties with this since his departure.
- An intermediate PFN page will be published soon with the PFN Data. A fully functional page will be published once web development is completed and tested.

Map Updates:

- Mark has continued to work on automating more aspects of map production to reduce that workload going forward.
- There are no updates for Animated maps and map corrections. There are no updates for attempting to produce Canadian deposition rasters.
- The PFAS Maps / Charts are TBD.
- Next mapping steps will continue to work to complete mapping corrections and complete animated maps. This will include updating map PDF files for corrected maps. Mark will also start working on uploading MLN maps onto the web.

Data Products:

- The Federal Sample Status Report has no updates at this time. Mark will be copying the report from previous years to future years for the immediate time.
- The Running Criteria Report has a lag due to SQL not working with malformed dates. Mark is working on a process to reduce that lag.

Known Data Issues:

- We are still working through the "Zero precipitation samples with chemistry" corrections. As background, these are samples where the precipitation gauges register 0 precipitation, but we have a sample bottle which is analyzed. Previously, these had been reclassified as Dry. We will be correcting all samples between 2018 and the current time frame. There are about 450 samples in that time frame that require updating. The individual samples have been recoded in our test environment. We are working on documenting the updates, generating updated aggregated data, and documenting the aggregated updates as well. We will make an announcement regarding the corrections prior to publishing the updates to the web.
- We have not made any updates or plans for the MDN Deposition errors discovered by David Gay and Bernard Firanski. As background, these are deposition measurements that are over 10% different than those calculated using the displayed concentration and deposition. It is to be addressed in the future.
- Mark continues to work to correct precipitation data logger clock errors. All updates are documented in the change logs.

Additional Discussion Topics:

- Noel asked for further context regarding the multiple corrections that are currently being performed (not as clearly summarized in original discussion).
  - Some NTN samples have 0 precipitation measured by the rain gauge, but have a bottle with sufficient sample volume for analysis. These had previously been categorized as Dry samples. After discussion, the data team agreed that this was incorrect and these should be categorized as wet samples with missing precipitation data. The PO data team decided to work on samples from 2018 forward, which comprises about 450 samples. Mark has made corrections to the individual samples thus far, but has not written those updates to the database. He will be working on updating the web database tables, documenting the updates, and updating the aggregation calculations (monthly, seasonal, annual).

  - Last year David Gay alerted Mark to some possible MDN deposition value errors discovered by Bernard Firanski from ECCC. David and Bernard found that many of the recorded deposition values were over 10% different from their calculations. Mark has taken no action on this at this time.

- Independent of the above item – The NADP PO data team reviewed the process for invalidating MDN samples due to high contamination. The process was not well documented. The former process involved David Gays help reviewing the samples, and using his judgment to classify samples as valid or invalid. The data teams plan is to make changes to the Data Review application to illustrate these high concentration / high deposition samples so Data Review can add notes to the specific sample. Mark can then have more clear indications on justification for samples to remain valid or be invalidated.

- pH correction (maps) – Mark had been producing the pH maps interpolating directly from the pH, which is incorrect. The correct way is to convert the pH to H+ concentration, interpolate the H+ concentration and then convert it back to pH for the map. 2022-2024 need to be corrected. 2025 is correct.

- Noel commented that Mike Bell is planning to bring up the topic of mapping criteria (i.e. NTN sites in the winter).
  - This may involve criteria exceptions for specific sample period considerations.
  - Mark commented that the current criteria have some leeway regarding mapping criteria #1 in certain conditions. Mark agreed to review this in detail in the Fall Meeting.