NO MOTIONS came out of the meeting

- Attendees: Zac Najacht, Nichole Miller, Richard Tanabe, Mark Kuether, Casey Lanham, Amy Mager, Chris Rogers, Tim Sharac, Greg Wetherbee, Greg Beachley, Amanda Cole, Aaron Pina
- Welcome New Members
    - Amanda Cole - Environment and Climate Change Canada
    - Aaron Piña - U.S. Forest Service
- Data Review and Reporting
    - Network summaries & Status (Zac Najacht/Dana Grabowski)
        - # of active sites, avg. # of samples per month, data sets are by month rec'd, preliminary data reporting turnaround times
            - NTN – Sept. 2022
            - MDN – Oct. 2022
            - MLN (Litterfall) – Annual reporting, 2021/2022 data reports almost complete (need review of notes codes/flagging); 2022/2023 sample analysis in process (near completion)
            - AMoN – Dec. 2022
            - AMNet – data obtained on a monthly to quarterly basis, on track to have all 2022 data reviewed by Spring Meeting
            - Precipitation Review – received and reviewed weekly

Network	Approx. Sites	Approx. Samples per Month
NTN	255	1075
MDN	82	340
MLN	24	Seasonal / Variable
AMoN	92	230
AMNet	11	8640 (5 min/month)
PRECIP	N/A	1200 (300 weekly)

    - Data to website (Mark Kuether)
        - Web data status
            - MDN - data posted through:
                - Weekly - July 2022
                - Annual - 2021
            - NTN – data posted through
                - Weekly – July 2022
                - Monthly, Season, Annual, WY - 2021
            - AMoN – data posted through December 2022
                - Current using live data
                - No annual summaries
                - Putting a static table in place where data can be reviewed before it moves to web
        - Program Office Procedures being documented & SOPs being drafted
            - Status
                - Data Manager High Level SOP - started includes position details, location of data and code, etc.
                - Data Manager Detailed SOP - started details of how data is reviewed and posted to web

- o Changes/Updates
  - ▪ Precipitation management program (Casey Lanham/Mark/Dana/Zac)
    - ● Web-based to program-based development – status update?
    - ● Casey has been working on this as a top priority with help from OIS; Dana helping as much as possible
    - ● Mark and Zac also involved
    - ● VB script to Java
    - ● Good progress
    - ● Will remain wed-based, but will be on a more efficient framework - faster, easier updates and upkeep
    - ● Updated the code/outlook scripts that moves files out of outlook
    - ● Precip processing – one last thing to figure out regarding altppt amounts, close to done
    - ● Next: focus on the front end that Zac and Dana use, integrate ppt review with data review so we are not doubling efforts.
    - ● Also work on the interface of the precip data summary
  - ▪ Updating NTN daily precipitation to format similar to MDN (Zac/Casey/Dana)
    - ● future plan to make these upgrades is in coordination with precip program upgrades
  - ▪ Precip request form (Richard created)
    - ● https://go.wisc.edu/6659ot
    - ● Not "released" at this time – currently people ask Mark K. for data via email
    - ● Requestor provides details up front
    - ● Data on number of requests, types of requests, and time to provide report
    - ● Mark and Richard propose a similar form for general data requests
    - ● This will streamline data requests for both NADP and the requestor
    - ● Curious about how this will be received; will it seem "off-putting" or less personal?
    - ● Where will the form be posted? It could go on multiple pages on the website and can also go out via the listserv(s)
    - ● CAPMoN has an internal request log/tracking system; Amanda expressed interest in potentially using a survey as well
    - ● We could run the surveys by DMAG before officially posting them to get input on feel, content,etc.
  - ▪ Data Review: reviewer flags, qualifiers & comments (Zac/Casey/Nichole Miller)
    - ● Possible data qualifiers (moved from spreadsheet to DR program)
      - o Testing currently in progress – near completion
      - o New process adds comments, notes codes and adjusts QR code automatically, no more copying from spreadsheet and manually adding codes
      - o Has moved to production; using old (spreadsheet) and new (incorporated into program) for rest of April to see if any issues surface
      - o Provides consistency and makes data review faster
    - ● minor changes to data review processes (Zac)
      - o automate/consolidate reviewer flags & comments – Less copy/paste, less mouse clicks, save time, more efficient
      - o apply statistical programs to pre-screen data sets and potentially identify outliers on both ends of the validity spectrum – identify samples whose QR code will not change with further review, focus on samples whose validity might change with further review.
      - o shifting roles/tasks within sample receiving & data team to continue implementation of more branched approach to data review as a whole
  - ▪ MLN (Litterfall) metadata, notes codes & QR codes (Zac/Dana/Mark)
    - ● Metadata document complete? - yes
    - ● Develop & implement notes codes & QRs?
      - o Feedback on possible notes codes – d, f, i, l, m, q –proposed at fall meeting will touch on these at spring meeting as well

- - - o 2021 dataset reviewed with QR and notes codes – complete? – qualifiers will be manually added to the 2021 data sets as needed.

- External Audit (Amy Mager/Nichole)
  - Responses have been submitted
  - A few items are to be addressed in QAAG/Spring meeting
  - 4-5 findings
  - If anyone wants to see the documents, reach out to Nichole
  - Richard will talk in Joint Session of Spring Meeting on PO Responses

- NADP Website (Casey/Mark)
  - Precipitation plots improvement
    - No updates at this time. The team has focused on updating the backend precipitation code, as well as updating the web interface for data review
    - To be reviewed after these projects completed
    - New website does not have precip data yet; waiting for the precip infrastructure to be rebuilt (first bullet above)
  - Status of concentration and deposition maps/future plans
    - Plans to add Grid files (grid files are what the maps are built from) to be released on web site again after 2018 due to user demand (no eta)
    - Mapping scripts not working. Mark and David are seeking assistance from OIS/IT to get these working so Mark can produce maps and grids for 2022 data and end user requests
    - Mark has had some success troubleshooting mapping scripts
    - PRISM data interpolated with our precip data and chem data to produce concentration and deposition
    - Richard – Grid files are produced by Greg Beachley and housed on EPA website; NADP website provides a link to this.
    - Mark will follow up with Greg Beachley regarding grids.
  - Data access format
    - Web API (internal code for our website) being re-coded and tested
      - NTN and MDN API coded and tested.
      - AMoN being redesigned to work from static table. Under development by Mark and Casey
      - Trends data functionality being reviewed - initial API testing indicates that this works
  - Web Data Change Log – record of major changes made to web data
    - Discussion about how broad this should be, should every small change be made available, or focus more on large scale changes, things that impact validity
    - Would be useful info for those who use our data to write papers
    - CASTNet has an "update date", currently we have a "date modified" column on website

- Siting Criteria Updates (Tim Sharac)?
  - Several products have come out of this effort
    - Reports
    - Windrose diagrams for orientation recommendations
    - Siting Criteria evaluation results (spreadsheet format)
  - Where should these go?
    - NADP website, QA section is one idea
    - Talk about at Spring Meeting for other recommendations?
    - Get posted after the Spring meeting
  - Tim will send a document containing windroses for sites oriented incorrectly and asking DMAG to review and vote on whether or not to grant a waiver for each site (NOTE – there was some discussion and follow up on this topic via email). Not sure where it currently stands.

- DMAG going forward (Chris Rogers/open DMAG comments)
  - CR: great agenda, hit all items of interest
  - CR: Long term planning for delivery of precip on the web is an important issue to address, this is in the works
  - Zac & Mark to continue as co-chairs moving forward