Joint Subcommittees Meeting Minutes

Hampton Inn
Pensacola Beach, FL
April 29-30, 2008

Greg Wetherbee called the meeting to order.

Meeting locations for the subcommittees were announced:
NOS – same room as joint
CLAD - De Luna C
DMAS - De Luna A
EROS - De Luna B

Approval of Joint minutes from Boulder (Fall 2007) tabled.

Introductions were made.

David Gay – State of the Network

David Gay became acting coordinator on January 1.
Van Bowersox - retired March 31.
New coordinator coming soon.
Mark Rhodes - new QA manager.

ISWS becoming part of new institute at U of I named "Institute of Environment and Sustainability". Funding now to come through university instead of through state.

Status of SAES Agreement

5-year agreement sent in by Van.
Need a new required review.
Review is occurring at Pensacola.
Dr. Bill Dugas - SAES science advisor from A&M in attendance at this meeting.

USDA/CSREES Agreement

Turned in April 20th.
New 4 year agreement submittted.

CAL Update

New site in AK = AK06, Bettles, AK

HAL Update

110 sites and counting. Still growing.

AIRMoN

New shipping protocol eliminated black box mailers and uses 6 packs of smaller cardboard boxes and is cheaper.
AIRMoN Data are moving to the PO very quickly.

2008 Budget Meeting

Washington, DC, July 16, 2008

New Training Classes - Proposal

Coinciding with Spring and Fall meetings? Other ideas will be discussed in NOS to make training classes more affordable.

Bob Larson – Precip gauge update

79 gages (combination installs(35) and purchases(44))
Software and gage updates.
Documentation status = ongoing.
Server Software nearly complete.
3 sites with telemetry - GOES, Internet, cell IP modem (automatic import).
Other sites (email, manual import).
Web access to precip data under development.

ETI issues

Reviewed 818,000 15 minute records.

Under reporting:
Optical sensor filtering and/or temperature filtering may be required.

Over reporting:
Temperature issue.
Changes to datalogger program may be required.
Optical sensor.
10 sec measurements averaged every 1 minute from load cell output.
Location of temperature measurements may be an issue. Currently it is temp of datalogger inside enclosure of gage (ETI) or separate logger enclosure (OTT).

One load cell failure on an ETI, probably from dropping bucket onto loadcell.

Ott issues

Remote Monitoring Module (RMM). $6790

RMM + Pluvio Gage, AC/DC: $6790
RMM + Pluvio Gage. DC Only: $6520

Pluvio2 – new gage.

400 cm area, 750 mm capacity.
Non-realtime - 1 minute delay in data calculation
Realtime = 6 seconds delay
4 interface options (advancement from previous serial string output)
Repairs done in Loveland, CO instead of Germany.
Model is at PO for testing.
IL MESONET getting 20 of these gages.

Bob Larson – Web Page

Trying to post the website on the Inet this summer.
nadp.com - cannot reach from some fed locations
nadp.info - available
nadp.edu - ???

Mark Rhodes – NADP Training Video

Shot in HD – will create video clips in variety of formats.

Mark Rhodes – Data Validation results

Two groups of students from a graduate level Statistics course at the University of Illinois at Urbana-Champaign are working with data from the NTN. One group is investigating a means to validate data from new sites. The second group is investigating data validation for existing sites.

At this time, results of their analyses are preliminary. Three clustering methods are under consideration for validation of data from new sites. A narrowed time window approach and a time series approach are under consideration for validation of data from existing sites. Preliminary results from both groups are encouraging.

Gary Lear – AMoN (Ammonia Monitoring Network)

18 sites began sampling in October.
3 NC sites yet to start.
Web page: nadpweb.sws.uiuc.edu/nh3net/.
Improved shipping procedure → reduced trip blank levels and MDL.
Field SOPs completed.
Draft lab and data management SOPs completed.
Showed list of sites - wide range of NH3 concentrations.
David Gay added –

- Repetitive network tasks moved to CAL April 1.
- Running collocated network with Region 6 EPA - Mark Sather (running network of passive Ogawas in South and Southwest).
- NC sites starting in May.

Funding for 2 years.

Data:

- PO has all of the data from the Radiello passives.
- Region 6's Ogawas – they are sharing data.
- Other partnerships - NC, LADCO, Environment Canada.

Goal: Trying to look at NHx contribution to total nitrogen deposition, and its role in particulate formation.

Eric Prestbo – MTN Update

CAMR was vacated (courts said it was not done legally).
Good news – there had been a rush to get data before rule put into effect.
Now we have more time - control technology will not be active as quickly, which will allow us to get more baseline information.
Maggie Kerchner reports that many states are moving forward with regulations.
Need QA "newspaper" (newsletter) for real-time mercury data.
2nd draft of SOPs nearly complete.
EPA-CAMD added support funding to selected monitoring sites.
Focus on harmonization of methods.
National Mercury Monitoring workshop - May 5-7 in Annapolis.
Site liaison candidate identified.
Intercomparison study at Beltsville, MD (EPA and NOAA).
Dirk Felton with State of NY doing intercomparision study.
First draft of data management SOPs nearly complete.

Pam Padgett – Governance Handbook

Discussed Governance Handbook, which will be discussed on Thursday during the Executive Committee meeting.

Greg Wetherbee – Site Urbanization Study

No effect on NTN data from changes in urbanization of land in proximity to NTN sites.

Gary Lear – subcommittee history lesson

Proposal - combine NOS, DMAS, and EROS.
Establish a "New Initiatives Subcommittee", which would break into working groups for CLAD, Ammonia Monitoring, Ambient Mercury, Dry/Total Deposition, etc.

Proposal was discussed without any motions being made. More discussion to occur in Executive Committee.

Minutes – Fall 2007 (Boulder, CO)

Minutes from Fall Joint Session were approved.
Motion by Kristi Morris.
Second by many.
Motion approved.

DMAS Report

Given by Gerard Van der Jagt. – See DMAS Minutes

EROS Report

Given by Andrew Johnson. – See EROS Minutes

NOS Report

Given by Greg Wetherbee – See NOS Minutes

QAAG Report

Given by Mark Rhodes

CLAD Report

Given by Doug Burns – See CLAD Minutes

Tracy Dombeck – Use of Resins to Measure Precip Chemistry

Resin columns have been evaluated for bulk deposition for sodium, potassium, calcium and magnesium using 1M HCl for extractions (Crabtree and Trudgill, 1981) and throughfall for sulfate, nitrate and chloride using 1M KI as an extractant (Simkin et al., 2003). A study of throughfall in pine forests (Fenn and Poth, 2002) evaluated mixed bed resins for ammonium and nitrate using 2M KCl as the extractant and colorimetric methods for analysis. There has been work done to evaluate both cations and anions using KI as an extractant. The CAL can evaluate their capabilities and reproduce results obtained by the Rachel Carson Analytical Facility, (formerly Institute of Ecosystem Study's IES Analytical Laboratory). They developed and modified an IC method for analyzing chloride, nitrate, and sulfate with 1M KCl used as an extractant.

Where to start:

Develop/Modify IC method on CAL's back-up Dionex 500 instrument.

Evaluate CAL's capabilities to prepare, extract, and analyze resin column extracts.

- Analyze excess samples previously extracted by IES.
- Compare columns prepared by IES with columns prepared at CAL - monthly composite with excess deposition from pre-determined sites and CAL's internally prepared QC solutions.
- Use NWRI samples to analyze for TN extracted in columns.
- Load ½ of KW group prepared columns and ½ of CAL prepared columns with CAL's in-house prepared QC solutions.

Time frame: 3-4 months, goal poster at NADP Fall Meeting.

Additional work - evaluate resins as throughfall and or wet deposition collection devices.

Additional Lab studies:

- Additional resins/extractants for a variety of analytes.
- Stability of resins, temperatures, moisture
- methods of extraction, i.e. sonicating shaking
- extractants more instrument friendly

Additional field studies:

- Evaluate strength and stability of resins in freezing and drying conditions.
- Collector design.
- Length of collection periods.
- Comparative study between wet collectors and resin collectors.

What new things could NADP learn?

Monitoring in remote/heterogeneous terrain where saturation density is low so better resolution.
May improve evaluation of nitrogen deposition (better ammonium stability)
May allow expansion of analytes in future, pesticides, trace species.
May allow for increased sampling duration.

Spring Meeting Location

Location	Votes
Charleston, SC	11
Pensacola, FL	6
Palm Springs, CA	19
San Diego, CA	17
Austin, TX	9
San Antonio, TX	8
Gary, IN	1

Kathy Douglas will work on package for each of the top 3 sites.

Greg Wetherbee – USGS Precipitation Chemistry Quality Assurance Project

See NOS Minutes

Coordinator Job Search Update

Search Committee:
Mark Nilles

Joyce Chagnon
David Kristovich
Chris Lehmann (replaced by Bob Larson)

Done with search – announcement in the next week or so.

Madison Fall Meeting

Celebrate 30 years but looking forward. Attempting to put together Ag session to re-engage agriculture into NADP. Focus will be on monitoring technologies and data needs for the next decade. Field trips to power plant and dairy farm planned.

Meeting adjourned.