April Non-Tidal Workgroup Conference Call Minutes

April 17, 2012, 1-3pm



Meeting materials can be found at following website:

http://www.chesapeakebay.net/calendar/event/18864/

Leadership:

Scott Phillips (Chair)	USGS	swphilli@usgs.gov
Lea Rubin (Staff)	CRC/CBPO	Irubin@chesapeakebay.net

Presenters:

Claire Buchanan	ICPRB	cbuchan@icprb.org
Joel Blomquist	USGS	jdblomqu@usgs.gov
May Ellen Ley	USGS/CBPO	mLey@chesapeakebay.net
Mike Mallonee	ICPRB/CBPO	mmallone@chesapeakebay.net
Peter Tango	USGS/CBPO	ptango@chesapeakebay.net
Tony Shaw	PA DEP	tshaw@state.pa.us

Participants:

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Bill Romano	MDNR	bromano@dnr.state.md.us
Charlie S.		
Donald Smith	VA DEQ	donald.smith@deq.virginia.gov
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Doug Moyer	USGS	dlmoyer@usgs.gov
Jackie Johnson	ICPRB	jjohnson@chesapeakebay.net
Janine Howard	VADEQ	janine.howard@deq.virginia.gov
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Kevin McGonigal	SRBC	kmcgonigal@srbc.net
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Mike Langland	USGS	langland@usgs.gov
Molly Pulket	PA DEP	mpulket@state.pa.us
Nita Sylvester	EPA	sylvester.Nita@epamail.epa.gov
Sherm Garrison	MDNR	sgarrison@dnr.state.md.us

MINUTES

Action Items from 4/17/2013 meeting:

- L. Rubin will work with J. Blomquist and M. Mallonee to crosscheck the NTN station list and report back to the NTWG.
- L. Rubin and J. Blomquist will create a list of potential stations for the NTN.

- Form Adhoc team to form guidance and protocols for using Automated Samplers in small watersheds.
- Cost estimation for a station with an automated sampler vs. a station with manual sampling, and reconcile whether converting to the use of automated samplers is a priority for the NTN.
- First Adhoc meeting will discuss who will lead the Adhoc group (M. Ley)
- Set up first conference call for Adhoc group after May 15th (L. Rubin)
- WY2013 data is due by May 15th, 2013 to Mike Mallonee (Data Providers)
- Update Mike Mallonee with new stations for the NTN for WY 2013
- Bring in speakers for future meetings to further discuss toxic contaminants studies

Introductions and Announcements, review and update on action items from 2/20/2013 meeting (S. Phillips)

February Action Items:

- Talk to R. Batiuk about EPA funding for the three MD stations (S. Phillips, P. Tango)
- Work with NY and PA to put together a list of gauges with funding needs (S. Gladding, P. Tango)
- Adjust NTN 2012 sample collection Spreadsheet based on today's updates (L. Rubin, P. Tango)
 (Updated as of 4/2/2013)
- Highlight changes in stations, parameters analyzed lab methods, and detection limits for Vistronix to update DUET for the 2013 sampling year. Send to MM (Monitoring organizations)
- Questions and concerns about the WY2013 QC Sampling Guide should be directed at M. Ley

Review of funding for the Nontidal Network and confirmation of 2012 NTN sampling spreadsheet (P. Tango and L. Rubin)

- P. Tango reviewed the budget for the NTN. Peter does not know the final budget due to sequestration cuts but will update the network when a conclusive budget is determined.
- L. Rubin confirmed that the updated 2012 spreadsheet was consistent with all jurisdictions except MD.

Discussion and Questions

- ACTION: L. Rubin will work with J. Blomquist and M. Mallonee to crosscheck the NTN station list and report back to the NTWG.
- Jurisdictions reported 2012 water sampling events for different timeframes based on independent jurisdiction contracts. Therefore, this table will not be used to represent success during the calendar year, but only for the function of updating the network. In upcoming years, jurisdictions will report sampling events in Water Year to the NTWG.
- ACTION: L. Rubin and J. Blomquist will create a list of potential stations for the NTN.

• If changes need to be made to the NTN due to funding challenges, the NTWG will develop an evaluation process to make informed decisions for the program.

Discuss consideration for enhanced collection needs at sites with "small" drainage areas (J. Blomquist) *Presentation*

J. Blomquist presented some of the challenges of implementing monitoring in smaller watersheds as part of the NTN. No official changes were made to sampling protocols or proposed analysis for small watersheds. There are very specific new needs for analysis of small watersheds because of how they respond to rain events. Recognizing these challenges, the NTWG should determine a systematic way to evaluate and develop protocols and recommendations for sampling and analysis in small watersheds. Current NTN sampling protocols are inadequate for small watersheds and temporary solutions include: manual storm flow sampling of 12-30 samples, which create a higher cost, higher level of effort, and an unclear rate in the return of investment.

Automated samplers (AS) significantly improve the hydrograph, allow for better water collection at significant times, but more costly and man-power intensive. In implementing AS there is a chance for a large bias depending on sampling protocols. Currently "continuous surrogates" are used to measure turbidity and conductance for the development of better models with higher frequency data but no trend analysis has been done using these instruments.

Discussion and Questions

- MDNR is investing in an ISCO automated sampler, but addresses the group as to whether this is a fair investment after hearing about other members experiences with the automated sampler.
 - The ISCO guarantees that storm samples will be collected during storm events, however storm samples need to be taken manually to reveal if there is a bias compared to crosssection composite water samples.
 - Adding an automated sampler can be an asset in load estimation but trend analysis may be challenging over time.
- ACTION: Form Adhoc team to form guidance and protocols for using Automated Samplers in small watersheds.
 - General recommendations include: engaging with other USGS programs to form some guidelines for the future.
- Currently 18 small watersheds using the def. of 100 sq. kilometers, five are less than 10 sq. kilometers in the current NTN.
- Are there automated samplers being used in NTN stations currently?

- Automated samplers are not being used in the NTN program but there are data collectors that use automated samplers for other programs.
- ACTION: Cost estimation for a station with an automated sampler vs. a station with manual sampling, and reconcile whether converting to the use of automated samplers is a priority for the NTN.

Developing guidance for the use of auto samplers at NTN stations—next steps needed (M. Ley)
M. Ley presented a <u>report</u> she found "Use of Continuous Monitors and Autosamplers to Predict
Unmeasured Water-Quality Constituents in Tributaries of the Tualatin River, Oregon" by the USGS in
Oregon to start the discussion on automated sampler protocols and next steps.

Discussion and Questions

- On page 9 of the USGS report in Table 2 the author wrote a ten step guidance for the placement
 of the automated sampler intake, for the intent of use for developing models of prediction with
 the continuous monitoring data.
- Next steps should include forming an Adhoc team to develop automated samplers protocols.
 New Jersey has begun to author a protocol for automated samplers and continuous monitoring data.

The following members are interested or mentioned for joining the Adhoc team:

May Ellen Ley	USGS/CBPO	mLey@chesapeakebay.net
Mike Langland	USGS	langland@usgs.gov
Joel Blomquist	USGS	jdblomqu@usgs.gov
Doug Chambers	USGS	dbchambe@usgs.gov
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Joe Bell	USGS MD	jmbell@usgs.gov
John Jastram	VA USGS	jdjastra@usgs.gov
Lea Rubin (Staff)	CRC/CBPO	Irubin@chesapeakebay.net

- ACTION: First Adhoc meeting will discuss who will lead the Adhoc group (M. Ley)
- ACTION: Set up first conference call for Adhoc group after May 15th (L. Rubin)

Data management status update for 2012 and discussion for 2013 (M. Mallonee)

Presentation

M. Mallonee reviewed the status of data submission for DUET for 2012 sampling WY and discussed/resolved the issues faced during the inaugural data upload to DUET. The presentation included possible error codes resulting in data set uploads, and changes that Vistronix is making accordingly. Water year data life cycle is explained in detail and timeframe of information needed by from data providers throughout the year.

Discussion and Questions:

- Data providers can submit data quarterly or at their convenience
- ACTION: WY2013 data is due by May 15th, 2013 to Mike Mallonee (Data Providers)
- ACTION: Update Mike Mallonee with new stations for the NTN for WY 2013

Update and next steps on PA concerns about using stream health indictor for restoration goals (C. Buchanan and T. Shaw) (1:19:00)

Stream Indicator Issues Paper

C. Buchanan and T. Shaw discussed the status of using the Stream Health Indicator to measure the Bay's tributaries approaching the stream target of 70% of fair, good, or excellent and discussed the limitations of the Indicator and planned next steps for technical improvements.

Discussion and Questions

- A suggestion for the future of the network is to put together a standalone program for all
 monitoring program to be able to calculate the BIBI independently of CBP. Currently the
 computer program is on the CBP server and would require the assigning of bioregions with GIS,
 and more. Refining the CBP BIBI to genius level is a matter of time and/or money but if there is
 interest, ICPRB would find a way of pursuing this issue.
- Habitat GIT will set up a small workgroup to address the use of the Stream health Indicator, address other approaches, stream health change over time, and a possible stream health metric that can be based on other information such as fish IBI, stream connectedness, and a goal that may focus more towards fish species they support. Jennifer Greiner may engage the NTWG for participation in this work group.
- ACTION: Ask Jenifer Greiner to update the NTWG about the Stream Health Indicator on the next conference call. (L. Rubin)

Overview of results from toxic contaminants report (S. Phillips)

Presentation

S. Phillips discussed key findings on the extent and severity of toxic contaminant in the Chesapeake Bay and the water shed from the Toxic Contaminants Report released at the beginning of this year. S. Phillips also proposed next steps for CBP and partners to address toxic contaminants in the future.

Discussion and Questions

- Discuss other toxic contaminants studies and reports released at future NTWG meetings
- ACTION: Bring in speakers for future meetings to further discuss toxic contaminants studies

Next steps on STAR project to assess and explain trends (S. Phillips)

S. Phillips reviewed the objectives and tasks that came out of the joint NTWG/TMAW meeting stemming from the STAR mid-point assessment workplan. S. Phillips shared suggested improvements and actions to address factors affecting trends (FAT). A workgroup has been created to address these issues on Tuesday at CBPO.

Discussion and Questions

More technical details to come after more discussion in the FAT meetings