SUMMARY OF DISCUSSIONS AND FOLLOWUP ACTIONS
Chesapeake Bay Program Partnership's
BMP Verification Review Panel
Wednesday-Thursday, August 28th-29th, 2013
www.chesapeakebay.net/calendar/event/20832/

Introductions and Objectives of Today's Meeting
- Dana York (Green Earth Connection LLC; Chair, BMP Verification Review Panel) verified participants and outlined the agenda.
- Nick DiPasquale (U.S. EPA, Chesapeake Bay Program Office) gave some opening remarks. He stressed that BMP verification is fundamental building block for Chesapeake Bay restoration, in his opinion. There are a lot of issues to challenge the Panel, including transparency, ongoing oversight, and factors such as climate change and long-term performance of practices. He expressed every confidence the panel will deliver on its charge and set the example for other regions or watersheds to follow.
- Dana York described the agenda and explained some operational rules for the two day session. She encouraged panelists to express their knowledge and insights as experts, not as representatives of their respective organization.
  - She reviewed the panel's original charge and the tasks for the panel over the two days.
- Rich Batiuk (U.S. EPA, CBPO) reviewed the verification framework schedule.
  - The Panel's recommendations from this meeting shared with Water Quality Goal Implementation Team (WQGIT) on September 9th. Dana York is being asked to present the Panel's recommendations to the WQGIT, Management Board (MB), and Principals' Staff Committee (PSC) over the coming months. Decisions on Partnership adoption of the basinwide BMP verification framework, and all the underlying components, ultimately made at cabinet secretariat level (PSC).
  - We want the entire partnership to buy into verification and, hence, we will be asking the jurisdictions, through the PSC, to review and sign off on each others' verification programs, an action without precedent within the Chesapeake Bay Program (CBP) Partnership.

Review of Possible New BMP Principle: Transparency
- Roy Hoagland, HOPE Impacts, BMP Verification Committee members, explained the CBP Partnership's Agriculture Workgroup requested guidance on transparency from the CBP BMP Verification Committee. Transparency is mentioned under Principle 3: Public Confidence. Two alternatives for the language were chosen to share with the Partnership. Asked for the Panel's input on the two different sets of words as well as feedback on the entire narrative.
- Mark Dubin (University of Maryland/CBPO; Agriculture Workgroup Coordinator): the transparency guidance applies to nonpoint sectors. The point source sectors' regulatory and permit requirements define their transparency.
- Comments/questions from Panel

- o Richard Klein: need to be sure the transparency description is consistent with the needs of local implementation efforts. Access to agriculture BMP data at the county scale does not reflect the needs at the watershed scale where a county is composed of multiple local watersheds.
    - Mark Dubin: there are constraints, e.g. federal cost-shared practices and resultant data are protected and private under the Farm Bill. We also want to recognize that other sectors have more point-specific data.
- o Mike Gerel: ensure the public can understand why there are differences in the scale of the data accessible by the public.
- o Rebecca Hanmer: aspects of the transparency definition came from CBP Partnership's Citizens' Advisory Committee (CAC) materials and the definition was checked with federal permitting NPDES officials. CAC sees this more as an operational definition of the existing Public Confidence Principle than as a new sixth principle. There is a danger of defining something as transparent when it is not. If site specific data are restricted or screened for legal reasons, they are by definition not transparent, but an evaluation process that allows third-party reviewers to have access to these data can be used to get around this limitation.
    - Roy Hoagland reaffirmed that the charge to the transparency subgroup was to provide a more specific set of definitions and operational description of the existing Public Confidence principle. There has been discussion of the need for an additional transparency principle, but there has not been any decision by the CBP Partnership.
- o Tim Gieseke: every time we add organizations with access to the data, it gets more complex. Providing public access to billions of data points does not equate to transparency. Recommend we consider focusing on indices, not counting BMPs.
- o Tom Simpson felt the definition of transparency to be more process oriented. Number 3 should be incorporated into the definition of transparency.
- o Rebecca Stack: the notion that all stormwater BMPs are countable may not always be true, given some incentive programs for some stormwater BMPs.
- o Robert Traver: recommend clearly defining independent and external. There are well established definitions of both terms—e.g., civil engineering professional societies. Also, transparency of the program is different from transparency at the site scale. Recommend we consider the continued evolution of the understanding of the performance of practices as a component considered under the adaptive management principle.
- o Dianna Hogan: how does the partnership carry out 3rd party review/oversight as referenced in the transparency text will need to be more clearly defined.
    - Mark Dubin: if we better define independent, e.g. within the state, then that may alleviate some concerns.
- o Mike Gerel: recommend selecting the phrase "most site-specific" as this will be defined by legal and programmatic constraints (which includes requirements of/constraints within the CBP partnership watershed model). Third party review of a verification program may be required if a sector fails to provide a level of public specificity that meets the transparency definition.

- o Tim Gieseke: watch with the use of the word independent in the transparency narrative as this might stifle innovation.
- o Curtis Dell: would "practical" be a better fit than "possible"?
- o Robert Traver: perhaps should add "review" between "independent" and "QA/QC."
- o Matt Monroe (WV Department of Agriculture, CBP BMP Verification Committee member): a lot of focus is on federal programs--remember we are also talking about non-cost shared and 1619 provisions don't necessarily apply to these data, though constraints apply to non-cost-shared as well. A lot of producers do not want to share non-cost-shared data unless it will be aggregated or protected in some way.
    - ▪ Dana York: some states, like Maryland, apply the same privacy requirements to non-cost shared practices included in conservation plans.
- o Tom Simpson: recommend adding specific examples of what we mean by transparency.
- o Rebecca Hanmer: making this more complicated by adding additional language to the "most site specific" language.

Review of Source Sector/Habitat Workgroups' Final Draft Verification Protocols
- • Dana York explained that each Panelist would have their turn to ask questions about each sector protocol. She also asked panelists to note anything they thought was missing from each protocol. Panelists could pass and they would get multiple opportunities to pose questions until all the possible questions were asked. After the panel's questions/ observations were recorded, the workgroup representatives (chair, coordinator) present would have the opportunity to respond to each questions/observation.

Agriculture
Panel Members Identification of Questions
- • Rebecca Hanmer: had hoped for more clarity on inspections. What is 80 percent? Not able to evaluate without those details. Also, why does 80 percent have to apply to everything? Does it apply to all programs or could there be different requirements for more important programs?
- • Dianna Hogan: why were relative cost and scientific defensibility columns removed? Curious because those seemed useful for decision making. Not sure how defensible the 80% level is, or how practical/achievable it is.
- • Tim Gieseke: concerned about the loss of three columns of information.
- • Tom Simpson: share Rebecca's concerns on the 80 percent. Still have difficulty interpreting the table. Who verifies functional equivalency if it is not to standards/specifications--could be very subjective.
- • Curtis Dell: if a state wants to include a practice and demonstrate it meets the 80% or better threshold, who or what entity will approve their method?
- • Rebecca Stack: who is the audience of the Agriculture Workgroup's protocol? The public or the states?
- • Robert Traver: do not see that we would learn much from this program. Did not see the feedback loop for the practices and programs.

- Richard Klein: same questions/concerns about the 80 percent threshold. Would this actually result in getting the partners access to the actual data on the implemented practices?
- Rebecca Hanmer: concerned about moving away from physical inspections by depending on a qualitative evaluation of proposed survey techniques which would result in only a sub-sampling of all BMPs.
- Dana York: also need to consider, as mentioned by Matt Monroe, the non-cost-shared data. Need to ensure that non-cost-shared practices have a verification protocol, even though that protocol may be slightly different.
- Tim Gieseke: why the blank column for management plan-based BMPs?
- Tom Simpson: does each BMP need to meet the CBP BMP definition? Same questions for establishing functional equivalency? How is the 80 percent threshold really applied?
- Tom Simpson: the Panel can't be expected to recommend something for which the Panel does not have sufficient documentation to respond to what actually is being recommended. Did not see clear documentation of specific procedures which yielded an 80 percent or higher threshold in the Tetra Tech documentation.

Agriculture Workgroup's Responses to the Panel's Questions/Observations
- Mark Dubin's (University of Maryland/CBPO; Coordinator, Agriculture Workgroup) responses to the questions/issues raised by Panel members:
  - The Agriculture Workgroup has not stated up front that NRSC and FSA verification program necessarily meet the Agriculture Workgroup's protocol/CBP Partnership's BMP verification principles—will likely be the case, but needs to be documented as so by each jurisdiction.
  - The Agriculture Workgroup had approved the matrix included in the July 15 draft document.
  - The three columns identified by Panel members were removed only from the summary matrix. The 3 columns will be included in the more detailed supporting documentation.
  - The 80 percentile threshold evolved from the finding documented within Tetra Tech report. Nothing ever is reported as 100 percent compliant—the Agriculture Workgroup recognized that it was not reasonable to seek complete compliance with standards/adopted definitions.
  - The 80 percentile was the midpoint of the values reported within the literature.
  - Bottom-line is confident that 80 percent of the reported practices have been implemented on the ground and are being operationally maintained consistent with the NRCS standard or the CBP adopted BMP definition.*
  - Have to get up to at least 80 percent in order to report the collective set of BMPs.
  - In terms of verifying functional equivalents, a jurisdiction may need to perform more frequent inspections to confirm the practice lifespan. The Agriculture Workgroup plans to provide a clear definition for functional equivalency.
  - The intended audience of the protocol/matrix has always been the jurisdictions as they have the responsibility for developing the specific protocol.

***POST MEETING NOTE**: To prevent further confusion, the above asterisked sentence is incorrectly stated when compared with the draft Agriculture Workgroup protocol included in the July 15, 2013 draft basinwide BMP verification framework document (see below text).

> "All tracked agricultural BMP data to be reported to and credited by the Chesapeake Bay Program Partnership is required to verified through a protocol meeting a minimum of a documented 80 percent level of statistical confidence. The preference would be for the level of statistical data confidence to be higher than the minimum. The proposed figure of 80 percent is based on the mid-point of a range of documented data confidence levels identified by the Tetra Tech verification study commissioned by the Agriculture Workgroup.[1] This level of statistical confidence is representative of a minimum of 80 percent of tracked BMP units (e.g. acres, number, etc.) that could be verified under a full on-site assessment to be implemented, operated and maintained according to the appropriate BMP standards."

Panel Discussion
- Rebecca Hanmer: wanted to see actual descriptions of what are the actual inspection procedures.
- Mike Gerel: how do we address the charge to evaluate whether the protocols are equivalent across all the source sectors?
  - Dana York: we could consider outlining the gold standard and then clearly explain why we are making these choices as we factor in recognized, real constraints.
- Robert Traver: important to have a way to learn and improve. There has been discussion of moving from percent removal to risk-based approach.
  - Mark Dubin: the Partnership's BMP review protocol calls for workgroups to consider previous recommendations every five years or so. Something similar could be done for verification. We will probably not get it right the first time. This will also not be implemented all at once, but will be a process as the states work through their programs with limited resources.
- Rebecca Hanmer: want to be sure the Panel fully understands that determining whether a specific verification protocol meets the 80 percent threshold is not based on a set of quantitative criteria, but on a qualitative evaluation by a still-to-be-defined group of experts.
- Tim Gieseke: need to clearly describe how we are addressing transparency across the different source sectors. For example, we are seen to be verifying 100 percent of the wastewater treatment facilities but only verifying 2-3 percent of the farms across the watershed—we have some explaining to do to our public audience to have them understand why we took this approach and why we considered these two very different verification approaches to be equivalent.
- Mike Gerel: important to explain when and why a gold standard is not met, and reasons why.

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[1] http://www.chesapeakebay.net/channel_files/18626/bmp_verification_supporting_information_final_draft_9-13-2012.pdf

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- Richard Klein: agriculture definitely seems to be most complex of the source sectors we are discussing. Was blown away when USDA's Conservation Effects Assessment Program (CEAP) report found 88 percent of the producers have conservation practices in place. And for most other sectors, those carrying out the verification protocols are not those directly involved in supporting the source sector itself whereas in the agricultural sector, the conservation districts are involved in both delivering services to the producers and conducting the verification procedures.
    - Mark Dubin: we also have to consider that agriculture is the largest managed land use in the Bay watershed.
- Robert Traver: the use of checks, x's and question marks in the matrix was very confusing.
- Tom Simpson: NRCS standards tend to be fairly high standards. Inspections should consider current conditions on the farm as in case of, for example, manure storage. Animal numbers change on an operation over time.
- Rebecca Stack: should consider breaking up the matrix into four separate tables as opposed to attempting to include everything into a single table.
- Dianna Hogan: how much more detail was the Agriculture Workgroup going to include in the documentation on transparency.
    - Mark Dubin response: the Agriculture Workgroup did not feel including details on transparency was useful as a column on the matrix. Important to recognize the variability, which is probably the most detail we could go into.
- Tom Simpson: might be good to clearly state that adaptive management is critical, because we know it is not going to be perfect. Not able to endorse or make a clear recommendation at this time. There may be a way to break it out by groups of BMPs.
- Richard Klein: looks like a portion of tomorrow will also be dedicated to agriculture. Perhaps consider recommending CBP effort to change federal laws that deter transparency.
- Rebecca Hanmer: wants to hear confirmation from the Panel members that a state just can't re-submit the Agriculture Workgroup's matrix as its verification program documentation. The Panel should expect each state to provide detailed descriptions of its planned inspection/verification procedures for different sets of related practices. Wants the jurisdictions to submit their protocols in plain English, rather than as in tables. Important question for states: what will they do to address their priority BMPs?
- Richard Klein: should also ensure that the Chesapeake Bay watershed model documentation variables are incorporated into checklist.
- Dana: Need to be much clearer in the Agriculture Workgroup's protocol on how to address non-cost shared practices.
- Tim Gieseke: Why would someone report the non-cost-shared BMP? Is there an incentive?
    - Mark Dubin: it's an emerging area. Some programs are trying to collect this information. For example, say there is a new easement on a property. A jurisdiction will want to count that easement towards its progress under the Bay TMDL, so the jurisdictions want to work with the landowner to collect the data. Outside those kinds of programs there needs to be a willingness to report that information.

- Rebecca Hanmer: for the forestry protocol, when the non-cost-shared buffers are reported, the protocol states that verification is not required for those practices until they account for more than 10 percent of the reported universe.
  - Mark Dubin: The Agriculture Workgroup felt that if anyone met the same standard, they would be treated equally, despite the source of funding.
- Dana York: states can't verify on the basis of the CBP adopted BMP definitions—they are not specific enough as NRCS standards are.

Forestry
  Panel Members Identification of Questions/Observations
- Richard Klein: agree that there is concern about the percentage of forestry operations that are evaluated independently to verify accuracy of data.
- Tom Simpson: for expanded tree canopy, how do you determine if it's expanded given trees grow slowly? Through remote sensing or through planting data? How do you verify that buffers still function, e.g. reasonably uniform flow through buffer rather than channelized flow?
- Tim Gieseke: questions about the BMP relative to the landscape. How is BMP effectiveness credit given the up-land landscape (e.g., land use, relative slope)?
- Dianna Hogan: wondering how they are looking at width (using average value?). Also, page 10 of Appendix J, confused what the four principles bullets are referring to. What is the relative importance of urban riparian buffer versus agriculture buffers? There is much more detail on the agriculture section of the protocol compared to the urban section. The first four practices are covered in Urban Stormwater Workgroup or Agriculture Workgroup's protocols—please confirm, as just want to make sure they are addressed in those protocols. Page 15, Appendix J, there is a confusing section.
- Rebecca Hanmer: because of dependence on USDA cost share programs for supporting riparian forest buffers, page 13, really need the agriculture community to advise the Forestry Workgroup on the timing of inspections. Page 14, the section is marked "optional" when it really should not be considered optional.
- Dana York: question about what counts as a professional program on page 7, appendix J. Talk a lot about partners. What/who are these local partners and what is required to be defined as a local partner? Is there some level of expected training or professional certification required?
- Richard Klein: who would be gathering the data that would be used for this verification?
- Robert Traver: for urban forest canopy, want to make sure we are not double counting with urban stormwater verification protocol.
- Rebecca Stack: who is reporting the urban forestry practices in urban environments?
- Mike Gerel: is verification every 5 years really enough?
- Curtis Dell: unclear how data records would be obtained for what is done on private lands.
- Tom Simpson: concerns about the frequency and adequacy (staffing) of inspections on private lands.
- Dianna Hogan: page 14, part 2: enhance appeal for monitoring? Is monitoring after planting 10 years later for determining functionality really being carried out? This section raises more questions than answers.

Workgroup Responses to the Panel's Questions/Observations
- Sally Claggett (U.S. Forest Service/CBPO; Forestry Workgroup Coordinator) responses:
  o Forest harvesting on private lands data is collected mostly by the states, with each state having its own methods for collecting data. Each state tracks forest harvesting BMP implementation differently. The protocol describes a minimum: to determine what the rate of forest harvesting BMP implementation is for a region, every 10 years, it jurisdiction would do an analysis of the rate of forest harvesting BMP implementation in that state and apply that rate to the number of acres harvested in the coming 10 years. The state would evaluate the state records of practice implementation originally documented by regional state foresters. This is protocol Maryland currently follows.
    - Rebecca Hanmer: harvest is assumed to occur on only 1% of the land in the watershed each year. So the Forestry Workgroup did not bear down too hard on this part of the protocol.
  o There is a two step process for verifying expanded tree canopy. Currently in the Chesapeake Bay Watershed Model, credit is given the year the tree planting takes place. To ensure there is a gain, look at aerial imagery every five years. If there is a loss of canopy, then there is no credit given for those five years and any previous credit is lost (page 11, Appendix J).
    - Dan Zimmerman: what is the reasoning behind that approach? Why take away any incentive for maintaining urban tree canopy. Seems a little extreme.
    - Rebecca Stack: Recommend clarifying the protocol text about removal of credit given specific situations.
  o The protocol is written for the entire jurisdiction. It was the Forestry Workgroup's intent that locals would collect this information and verification could be at the state scale. Whoever is claiming the tree planting will need to collect the data.

Panel Discussion
- Tom Simpson: are you counting loss of tree canopy against a jurisdiction? Does the conservation reduce the amount of loss?
  o Sally Claggett: This part of the protocol is focused on ensuring a net gain in canopy.
- Dianna Hogan: why not include the agriculture and stormwater-forestry related BMPs in the agriculture or stormwater verification protocols. Could become a double counting issue. Was not clear what the actual forest harvesting BMPs were. Recommend adding a more complete list of these practices in the protocol description.
- Sally Claggett: to assure a riparian forest buffer is still functioning, NRCS has protocols to check for channelization. This is only during spot checks that occur on 10% of the projects. One hundred percent of the buffer sites are visited during the establishment period. During year three or four, if the forest buffer is satisfactorily established, then annual visits are no longer conducted and spot checks are performed randomly after that. It is important to distinguish those two phases—establishment and maintenance. EQIP contracts likely have different requirements. We need to treat these as agricultural BMPs, but ask for the width of each buffer and confirmation of a net gain over time.

- Rebecca Hanmer: need to ensure there is no double counting with the stormwater management practices. Beyond stormwater management, there is tree planting being carried out for other purposes which needs to be credited.
- Richard Klein: even though there are not supporting shrub or other layers in some urban areas, would hope to credit continuous canopy in urban areas.
- Dana York: who counts as partner? Staff? Contractor?
  - Sally Claggett response: A staff or contractor that reports the forestry practice data to the state.
- Tim Gieseke: need to identify, across the sectors, those designated as responsible for gathering the verification data and need to understand their level of training/certification.
- Rebecca Hanmer: for loss of credit issue, would encourage distinguishing between private and public lands.

Stormwater
  Panel Members Identification of Questions/Observations
- Rebecca Hanmer: for non-regulated (non-MS4) areas of the watershed, would it be valuable to distinguish between areas with high growth and low-growth?
- Dianna Hogan: verification carried out once a decade may not be adequate.
- Curtis Dell: in definitions, there is "'non-regulated" and "semi-regulated". Text refers to "semi-regulated" and "regulated", but did not see the non-regulated areas addressed.
- Mike Gerel: echo Dianne's comment about verification conducted every 2 permit cycles (ten years). Enjoyed semi-regulated concept. On what period would the sub-sampling be done for the non-regulated stormwater on Option 2? Would perhaps more like to see a statistical sampling conducted more often, rather waiting for a more comprehensive evaluation of the entire population every 10 years.
- Robert Traver: on page 20, treatment train of BMPs – how are they credited? Have no issue with inspections every 9-10 years. Would emphasize first year inspection and maintenance for low impact development or LID practices. Question on page 25, option 4.
- Richard Klein: would like to see emphasis on local jurisdictions' inspections of runoff reduction BMPs and stormwater retention practices every 3 years. Maybe we should encourage a basinw-wide version of StormwaterPrint that could serve as basin-wide database for stormwater BMPs.
- Dianna Hogan: for option 3, seems like bad idea to apply a subsample to other regions.
- Tom Simpson: don't know if we are giving credit for legacy BMPs, but if we are crediting them, do we remove or reduce them?

Workgroup Responses to the Panel's Questions/Observations
- Norm Goulet (Northern Virginia Regional Commission; Urban Stormwater Workgroup Chair) and Tom Schueler (Chesapeake Stormwater Network; Urban Stormwater Workgroup Coordinator) responses:
  - Tom Schueler: Non-regulated jurisdictions are primarily located in Pennsylvania and West Virginia, are only subject to construction general permits, and have very limited requirements. Most of these areas are in low-growth category. Think it is great suggestion to focus sub-sampling on high-growth areas.

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- - Norm Goulet: for most part there is no regulatory hammer for these areas once construction is over and the general permit no longer applies.
  - o Tom Schueler: four BMP expert panel reports have been approved by the CBP Partnership under the BMP review protocol and are available online. There have also been efforts by Chesapeake Stormwater Network and others to develop visual performance indicators for BMPs.
  - o Tom Schueler: In stormwater programs for new and redevelopment, there are multiple inspections throughout the construction period and a final inspection upon completion, all which are not described in the protocol. In MS4 areas, there are inspections done every permit cycle. Would agree that LID practices should probably be inspected annually.
    - - Norm Goulet: The verification inspection process would be more rigorous than typical inspection scheduled under the MS4 program.
  - o Rebecca Hanmer/Dianna Hogan/Tom Simpson: the workgroup needs to revise option 3 on page 25 in terms of the low bar it sets.
  - o Tom Schueler: A BMP that is not inspected/verified should not be reported and credited—that was the basis for option 4 on page 25.
  - o Norm Goulet: Non-regulated BMPs are practices that are voluntary and are not currently reported to the Chesapeake Bay Program.
    - - Tom Schueler: there is a pilot project in Howard County to track homeowner BMPs. These practices tend to be very small.
      - - Rebecca Hanmer: is it worth making a distinction between these voluntary BMPs and required BMPs if they are both implemented in stormwater regulated areas?
        - o Norm Goulet: these voluntary practices would be considered part of regulated universe. For most part, localities do not report those. For the most part, state tracking systems do not accept them.
  - o Tom Schueler: Treatment trains of practices are addressed in new state performance standards BMP expert panel's recommendations.

Wastewater
Panel Members Identification of Questions/Observations and Workgroup Responses
- Tanya Spano (Metropolitan Washington Council of Governments; Wastewater Treatment Workgroup Chair) and Ning Zhou (Virginia Tech/CBPO; Wastewater Treatment Workgroup Coordinator) responses:
- Rebecca Hanmer: The reference to 'non-significant facilities' is a typo on first page (page 28). The NPDES system works only if there are nutrient limits in the permit.
  - o Tanya Spano: right about typo. It should read "significant", not "non-significant".
  - o Tanya Spano: most significant facilities have nutrient limits in their permits. There is a reality that because of permit negotiations and workload, some permits are held up, but the existing permit is typically administratively extended. Do not believe there is a significant set of plants missing, but we can ask the Wastewater Treatment Workgroup members on this.
  - o Rich Batiuk: Monitoring requirements are present in all the significant wastewater treatment/discharge facilities' permits.

- o Ning Zhou: some jurisdictions also have monitoring requirements for non-significant facilities, e.g. West Virginia and Maryland.
  - o Tanya Spano: we can clarify the language.
- Dianna Hogan: are on-site regulations in place for West Virginia?
  - o Ning Zhou: West Virginia does not have on-site treatment systems regulations in place, but the jurisdiction will follow the protocol for the verification of advanced treatment systems. Only three jurisdictions—Delaware, Maryland, and Virginia—have on-site treatment system programs/regulations in place right now.
- Richard Klein: the ECHO website has been notorious for errors. Does the Chesapeake Ay Watershed Model rely on that same data? Second, with land application sites here in Maryland, sometimes one finds that partially treated wastewater has saturated the site or is flowing into a nearby stream.
  - o Ning Zhou: ECHO data is from the facilities discharge monitoring reports or DMRs, but CBP Partnership does not use the ECHO data. We work closely with seven jurisdictions to get the wastewater treatment facility data directly from them and QA/QC it closely working with them.
    - ▪ Richard Klein: Is that data publicly available?
      - Batiuk: Yes. We can provide a link.

ACTION: CBPO staff to provide Richard Klein with the URL link to publicly available wastewater data.

- o Ning Zhou: the Wastewater Treatment Workgroup is looking at spray irrigation issue to learn how we can incorporate this practice into the Chesapeake Bay watershed model into the future.
    - ▪ Tim Gieseke: so verification would expand beyond the treatment plant in this case.
- Dianna Hogan: question about the reference to an expert panel that might make recommendations on inspection frequencies for on-site treatment systems?
  - o Ning Zhou: that is a separate expert panel convened to address on-site treatment systems and their effectiveness in reducing nutrient loads. That BMP expert panel is operating under the Partnership's BMP review protocol.
- Rebecca Stack: surprised at how low the combined sewer overflow or CSO contribution is to nitrogen and phosphorus loads to the Bay.
- Tim Gieseke/Tom Simpson: need to make it much clearer on page 30 the on-site treatment system verification will focus on nitrogen-reducing treatment systems that are reported for load reduction credit.
- Tom Simpson: need to address verification of septic system pumping in the protocol—without verification, no credit should be given.
  - o Tanya Spano and Ning Zhou: there is paperwork documenting the pumping, however, it is usually a county requirement, not a state requirement.
- Rebecca Hanmer raised concerns about the physical size of the on-site systems and whether that needs to be more specifically addressed in the protocol. Regulation of large systems varies by state, e.g., VA has VPDES requirements for systems above a certain volume.
- Tanya Spano: We will need to add clarifications in response to panel's comments.

Panel Members Identification of Questions/Observations and Workgroup Responses

- Neely Law (Center for Watershed Protection) and Mark Secrist (U.S. Fish & Wildlife Service; Stream Health Workgroup Co-Chair) responded to questions and comments from Panel members.
- Richard Klein: skeptical of removal efficiencies assigned to some stream restoration practices.
- Robert Traver: how do we account for degraded streams in the Chesapeake Bay watershed model and then credit restoration of the stream?
- Rebecca Stack: There is nothing in the protocol that ties restoration and the stream to the surrounding watershed? Should there be?
- Mike Gerel: curious about basis of the 25 year storm cutoff?
  - Neely Law and Mark Secrist responded that 2, 5, and 10 year storm events are not catastrophic for most projects. There is regular monitoring during first 5 years. Would hopefully catch anything catastrophic between year 5 and 25. If failure, would have to fix and verify the fix to retain credit.
- Curtis Dell: does this apply to every stream restoration project earning credit?
- Tim Gieseke: who conducts the inspections?
  - Neely Law indicated that monitoring requirements are tied to the permits that identify the responsible parties.
- Dianna Hogan: protocol relies heavily on the function based stream assessments—what's timing for the underlying source publication and how well do the assessments align with data requested by the CBP? Not really adaptive management (number 5 on page 42).
  - Dianna Hogan: seems to rely on function based stream assessments that are still under development.
    - Mark Secrist: the function based stream assessment framework has been completed.
  - Dianna Hogan: concerned that there is overlap between wetlands and stream restoration protocols.
    - Neely Law: protocol 3 that deals with floodplain reconnection discusses establishment of wetland-like conditions, and there was a need to elaborate on this. A wetlands BMP expert panel has been requested and would consider it.
      - Denise Clearwater: we hope restoration of hydrology to partially drained wetlands will be looked at under a request for an expert panel on wetlands as a BMP.
- Rebecca Hanmer: think that what is happening on upland areas impacts viability of the restoration project. Not sure how that factors in.
  - Neely Law: not applicable to verification.
- Rebecca Hanmer: who is responsible for post-project monitoring?
  - Neely Law: there is an effort underway to attempt to streamline the permitting process for stream restoration. Still ongoing.
    - Mark Secrist: also a discussion about post-construction monitoring. EPA, U.S. Army Corps of Engineers and others are in talks.

- Rebecca Stack: Page 43, number 10 seems to imply there needs to be a process to avoid double-counting, but there currently is no process?
- Richard Klein: suggest including upstream and downstream monitoring, particularly for protocol 4 projects.
- Robert Traver: It is very difficult and expensive to monitor stream restoration projects.
- Rebecca Hanmer: still very unclear exactly who is responsible for conducting these inspections. There is a great opportunity to standardize the post construction monitoring within the Corps of Engineer's permit for the actual stream restoration project.

Wetlands
Panel Members Identification of Questions/Observations and Workgroup Responses
- Denise Clearwater (Maryland Department of Environment; Wetland Workgroup Chair) responded to input and questions from Panel members.
- Dianna Hogan: same comment on adaptive management as with previous sectors. Much of the wetlands protocol references back to the agriculture and urban stormwater protocols so question whether this section is even needed.
  - Denise Clearwater: currently there is no enhancement BMP. Hope for expert panel to address this.
- Tom Simpson: there are restrictions on wetland banks, e.g. cannot trade credits for other purposes like nutrients. Is it okay to count mitigation banks towards the WIP targets?
  - Denise Clearwater: wetland mitigation is not included in reporting for this purpose. It is reported for other goals, such as no net loss. Not reported into NEIEN.
- Mike Gerel: several sections of the wetlands protocol includes language that cite lack of funds as a reason for likely not carrying out verification.
  - Denise Clearwater: practitioners would be glad to do more monitoring if they had more resources. They outlined what they are able to do and explain that in the protocol.
- Rebecca Hanmer: For wetland restoration projects, what percentage falls under government programs? Are there data on non-profit or other projects that could potentially be double-counted?
  - Denise Clearwater: some tidal restoration projects might be reported as wetlands and as living shorelines, so there is some potential for double counting. There needs to be a protocol of where to count these in the database.
- Rebecca Stack: why don't we take the same approach as tree canopy—if we are not getting a net gain in wetlands (or restored streams) at the local level, we should not be giving credit at all.
- Dianna Hogan: forestry suggested using imagery to verify that there is no net loss. Could this work for wetlands?
  - Denise Clearwater: Remote wetland interpretation can be very expensive. WRI is updating coastal wetland maps for coastal counties in MD and the James River, so there may be an opportunity there. But wetlands are much harder to detect than tree canopy.
- Robert Traver: why not use the same protocol for verification for wetlands captured under the agriculture and stormwater sectors for wetlands being restored outside of these two sectors?

- Mike Gerel: what does protocol apply to?
  - Denise Clearwater: all restored wetlands. All urban wetlands restoration, WRP, and CRP projects have follow-up visits built in. The idea in the protocol is to visit everything at least once to ensure constructed as designed, check for invasive species, etc. Very simple, as we are limited by existing resources. Do not believe there is currently a good grasp of how many of these sites are taken out or not maintained.

Panel Only Work Session

Adjourned – Day one

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Day Two
Thursday, August 29th

</div>

Welcome & Introduction
- Dana York reconvened the panel and discussed the day's agenda. She explained there should be sufficient time in the morning to cover the listed agenda items, leaving the afternoon free for an extended work session for Panel members.

Ensuring Full Access to Federal Cost Shared Conservation Practices
Dean Hively (U.S. Geological Survey), Olivia Devereux (Devereux Environmental Consulting), Kelly Shenk (U.S. EPA Region III), and Susan Marquart (USDA/NRCS, CBP BMP Verification Committee member) responded to questions and comments from Panel members.
- Dean Hively explained the project began using data for the 2012 annual progress run. The data was across multiple databases and datasets. States with their own 1619 agreements also have the opportunity to work directly with their NRCS state offices.
  - Olivia Devereux: we were able to refine our request for the 2013 progress run based on the 2012 data experience.
- Robert Traver: not as familiar with the agriculture sector. What scale of data is available to EPA for these practices? Are they able to check the site level data?
  - Dean Hively clarified that USGS has a 1619 agreement so it could check data in the field, but EPA is not a 1619 collaborator, so USGS aggregates the data before providing it to the CBPO.
- Rich Batiuk explained that some states previously did not have full accounting for practices under federal cost-share programs. The goal of this effort was to ensure the Partnership was counting all the practices that are installed with federal cost-share funds, while also ensuring we are not double counting. The idea was to also build off the existing verification for these cost share programs.
- Dianna Hogan: so the problem is that data is not collected or consolidated? Can this be fixed easily, e.g. by adding a data field?
  - Olivia Devereux: in some cases it would require collecting the data, not just adding a data field. So there would need to be efforts to collect some of the missing information to meet CBP definitions.
  - Dean Hively: the federal cost-shared practices are being counted in some form, but the CBP Partnership's Scenario Builder gives lowest credit when the more

detailed management data are not provided. Having this additional information would allow for greater credit.

- Dean Hively: In 2012 dataset, for example, all we know is that there is a manure storage structure, but do not know how many animals or what types of animals. USDA is not collecting that data, but it would be in the farmer's records.
- Tom Simpson: what about conservation technical assistance (CTA)?
  - Dana York noted that if CTA is reported, the farmer funded practice meets standards.
- Mark Dubin: anyone can access the aggregated NRCS information online, but need non-aggregated data to get details needed for full crediting through the Chespeake Bay Watershed Model.
- Tim Gieseke: what are the most worrisome pieces based on the USGS effort?
  - Dean Hively: these things are very integrated at the beginning and planning stages. Once it goes into the tracking databases, it becomes less streamlined and more complicated. States with 1619 data sharing agreements stay integrated, but states without1619 agreements do not have integrated tracking and reporting systems fully accounting for federal cost shared programs.
  - Olivia Devereux: the differences between NRCS standards and CBP definitions also leads to problems in tracking and reporting. For example, spraying for phragmites removal counts as wetland restoration to NRCS, but not to the CBP. We do not know how to identify when the wetland restoration reported as phragmites removal.
- Rebecca Hanmer: What did USGS have in mind in the section on page 42 entitled "Increasing Information Availability to the Public"?
  - Dean Hively: we're working to aggregate data to different scales—reporting at the watershed HUC-12 scale versus county—to better match with monitoring data and state watershed implementation plan (WIP) implementation.
- Dean Hively: currently USGS has a 1619 data sharing agreement with USDA in place through 2015. By that point perhaps the states can move to a point where, like New York and Maryland, they have their own tracking systems and would not need USGS to play this role.
- Richard Klein: why can't individual BMP data be made available at the farm scale, particularly for those practices which anyone can see have been implemented.
  - Dean Hively: you can currently go online and see how much cost-share money a farmer receives. Practice specific information is protected under Section 1619 of the Farm Bill. Any farmer is free to waive and release their own data as they see fit.
- Tim Gieseke: when a contract expires, is there a red flag that the practice is past its lifespan and should be removed?
  - Dean Hively: no.
- Rebecca Hanmer: should we discuss a sunset for practices?
  - Dana York: we will need to consider this across all the source sectors.
- Mike Gerel: feeling challenged in terms of how to meeting principle 3—public confidence—based on what the Panel has heard.
- Kelly Shenk: are there situations when aggregated data is acceptable and there can be confidence in it. That is a fundamental question for the Panel to consider.

- Dana York: there is a protocol issue here, too. Need to address the question as to whether NRCS and FSA verification efforts themselves meet the CBP Partnership's principles and BMP verification protocol. Will the Panel expect states to double check the NRCS data or not?
- Richard Klein: see a lot of reasons why we should try to transition away from aggregated data.
  - Dean Hively noted that the BMP data is not applied at the field level in Scenario Builder, but at the county level. So for crediting through the Chesapeake Bay Watershed Model there is no need for site specific BMP data for farms, but there is a need for watershed-based segments by county.
- Tom Simpson: Is there a legal reason within the Farm Bill whereby a 1619 data sharing agreement can't be signed with a regulatory agency?
  - Olivia Devereux: No.
- Rich Batiuk noted the USGS report was scientific and unable to make recommendations. He reviewed the specific draft recommendations in Section 15 of the July 15, 2013 draft basinwide BMP verification report for ensuring full access to federal cost shared data.

Partnership Process for Evaluation and Oversight

Rich Batiuk (U.S. EPA CBPO/ CBP BMP Verification Committee Chair), Mary Ellen Ley (USGS/CBPO), and Brian Benham (Virginia Tech; CBP Scientific and Technical Advisory Committee member) responded to questions from the Panel.
- Robert Traver: is there a feedback loop to learn from data collected through verification?
  - Rich Batiuk: CBPO staff looks at the annual progress submissions pretty closely and are able to flag any anomalies for discussion with the jurisdictions.
- Brian Benham: the current source sectors' protocols may serve as guidance, but does not see them as protocols at this stage.
- Richard Klein: there are very few independent evaluations out there of how well stormwater practices are maintained in the field. What we need is an independent body to provide confidence that these practices really exist and are functioning.
- Tom Simpson commended STAC for their input. Felt they made a lot of great points.
- Dana York asked Rich Batiuk and Mary Ellen Ley tell the Panel more about the Quality Assurance Project Plans (QAPPs or QA Plans).
  - Rich Batiuk: under the Chesapeake Bay Program's grant guidance, any jurisdiction that receives grant money for use in the collection or application of environmental data has to submit a QA plan for the data they collect and share with the CBP. Part of the guidance stipulates they will provide annual implementation data. The QA Plans from the jurisdictions describe their data tracking and reporting systems. There is currently much less information about verification, though there are verification elements in some of the states' plans.
    - Mary Ellen Ley noted the CBP Partnership's BMP Verification Principles closely reflect the data quality objectives for the QA plans.
    - Rich Batiuk: described Mary Ellen Ley's role as the quality assurance manager for the Chesapeake Bay Program Partnership. She oversees quality assurance for monitoring data that is collected shared within the CBP Partnership.
- Dana York: there is a reference to "EPA-R2" guidelines for data quality?

- o Mary Ellen Ley: "EPA-R2" is very general and mainly applies to laboratories, but EPA has a policy that it also applies to data compilation. Jeff Sweeney also develops guidance for the jurisdictions' annual progress submissions.
- Brian Benham: think it is a flawed analogy to compare monitoring network data with the BMP data submissions. The standard protocols do not exist to QA/QC the BMP data. The information that CBP asks for goes to tracking. There is a difference between tracking and verification. Certainly have to know the scope of universe with tracking, but verification in the field, or with statistical methods, is separate, but linked.
- Robert Traver: we should use data that is collected for verification to check our assumptions about BMP performance. It would be silly to not use this data that gets collected through some sort of feedback loop.
- Rebecca Hanmer: we could be talking about a significant workload to verify or visit all these practices. This has not been done at this scale before. One question is how we deal with a vast compliance monitoring universe, and how we deal with statistical methods. Statistical methods like CEAP will be needed to keep costs at acceptable level.
- Dana York: what is meant by "independent entity" referenced in STAC document? Also, as a practical matter, where would money come from to fund an independent verification entity?
  - o Brian Benham: the idea was that another group would verify or assess the data that the states submit. The performance of that entity or group could also be assessed. Perhaps a portion of Chesapeake Bay Program's grant funds could fund verification in this regard.
- Tom Simpson: is there a track record where the Chesapeake Bay Program is able to dispute questionable data from the states?
  - o Olivia Devereux: we absolutely question data when there is abnormally high or low implementation rates for practices. Sometimes there are valid reasons why something is very high or low. Policies or programs may have changed to increase or decrease implementation. Other times the states might resubmit the data.
    - ▪ Rich Batiuk noted that there are several instances when the Governor of a jurisdiction will write to the Bay Program asking about credit for certain practices that was not given. So there certainly is a track record.
- Richard Klein: I could see a situation where a number of small 1-square mile areas or subwatersheds are surveyed for practice implementation and performance. However, if there is going to be improved management or maintenance of these practices, then there needs to be interaction and education of the facility owners.
- Robert Traver: one key is developing the databases and making this data available to researchers or others. Robert Pitt, University of Alabama, has done all sorts of great work using data collected by MS4 programs.
- Dana York: did the STAC group have thoughts on sector equity?
  - o Brian Benham: sectors did not enter our conversation much. After listening yesterday, feel that the STAC proposals could apply in the different sectors. Again, suggest that the current sector documents are not protocols, but guidance to achieve the verification principles.

- Rebecca Hanmer: the sector protocols are closer to compliance monitoring which is different from statistical approaches like CEAP. Think that the STAC proposal to take the verification out of the states' hand would be a drastic change.
- Mary Ellen Ley: in the quality assurance realm there is validation and verification. Validation is the accounting. For example, when a county NRCS representative checks that a practice is installed to specs before it is entered into the spreadsheet or database. Verification occurs at a higher level, usually with statistical sub-samples of the data. Ideally, the verification is by another entity than the one who collected or validated the data to begin with. Suggest including validation with this system of verification.
- Richard Klein shared the Chesapeake Stormwater Network's technical bulletin on bioretention. The document provides tremendous guidance on how to check the performance of bioretention facilities. He also shared the sample stormwater inspection worksheet that was included in the stormwater verification protocol.
- There was discussion among participants about the definitions of – and relationship between – validation, verification, and other terms.

ACTION: The Panel will need to provide clear definitions of these terms—validation and verification–moving forward.

- Rebecca Hanmer: we may have to build in an automatic sunset for historical practices.
- Mike Gerel felt resource issues should not be the sole driver of protocol design. Resource, legal, logistic, and other constraints, should absolutely be full considered, and then the protocol should evaluate the use of 3rd party checks, statistical samples, and other creative means to meet the principles and transparency definition within identified constraints..
- Dana York recalled discussion from the previous evening. Setting a standard can help encourage innovation. We do not want jurisdictions to just latch onto minimum requirements or to focus on why they cannot achieve gold standard. They would instead focus on what they can do to meet the standards.
- Dana York: It generally takes 5 years or so, with training, etc. before there is adoption of something new. This is another reason why adaptive management is so important.
- Rich Batiuk asked the panel to consider what kind of mechanisms will be in place to ensure these reported practices are there? How would we carry it out? Re-convene an independent panel every four years?
  - Brian Benham: could be a consortium of land grant universities or it could be an non-governmental organization. Perhaps they would go back and look back at the data that went into the two year milestones.
  - Richard Klein: should not rely on volunteers from watershed groups as an essential part of the verification process. Would need an overseeing government agency of some kind. Public online access to the verification or reported information would provide opportunity for groups to go out and kick the tires and determine when the claims about implementation are accurate.
    - Rebecca Hanmer: perhaps putting this stormwater information online could be a special project similar to the 1619 USGS effort.
- Jeff Sweeney: in response to earlier comments, there is an implementation date for each practice reported by the states, so it could be removed at the end of a lifespan or certain

length of time. There is a question about who would handle that, the state or the Chesapeake Bay Program Office.
- Tim Gieseke: are there local models that are used for planning or implementation purposes?
  - o Matt Johnston: all the localities do things differently. Some, like DC, use models to inform their programs.
- Brian Benham: validation goes to reporting/tracking/accounting. There are protocols for getting these practices into the Chesapeake Bay Watershed Model following expert panels' recommendations. Personally, would like see verification as an assessment of that reported data. Protocols are required to conduct that assessment. The design of that oversight is perhaps a role for the CBP advisory committees.
- Robert Traver reiterated the point about a feedback loop. Verification ought to be used to check assumptions and thus inform a check on the wider system.

Jurisdictional BMP Verification Documentation Expectations
Mary Ellen Ley (USGS/CBPO), Rich Batiuk (U.S. EPA CBPO), and Jeff Sweeney (U.S. EPA CBPO) responded to questions from the Panel.
- Jeff Sweeney explained there are a variety of fields for a practice to go through NEIEN (National Environment Information Exchange Network), but typically there is just location, units, and other basic fields.
  - o Jeff Sweeney: in response to comments about quality assurance for annual progress runs, for every BMP we are looking for red flags and compare that year to the history. We look at percent changes each year and flag numbers that are either very high or very low. We highlight those issues for the state and discuss them over conference calls. We may do this two or three times with a jurisdiction before the issues are resolved. The history is entirely different from annual submissions.
  - o Mike Gerel: for our purposes, it may be helpful to make certain fields required in NEIEN for better tracking and accounting purposes.
    - ▪ Rich Batiuk: the source for the data could be connected back to the QAPP. Could take a look at the steps that were taken with the data. Right now that data is not necessarily connected all the way through the QAPP and NEIEN.
    - ▪ Mike Gerel: based on previous experience it was a challenge to determine where a lot of this data came from, whether it was paper records or best professional judgment.
- Dianna Hogan: this is the kind of information we are asking for in section 13, correct?
  - o Rich Batiuk: yes, what we're describing here is what the states would be asked to document in their QA Plans.
- Mary Ellen Ley: we ask for the originating source of data, if they are not the ones collecting it directly. That way we can potentially contact the source if needed.
  - o Rich Batiuk: we would like feedback from the Panel to know if we should be going back to check on this data.
    - ▪ Rebecca Stack: Region 3 audits our stormwater program every three years.
      - • Jeff Sweeney: that should be mentioned in DC's QA plan so we have greater confidence in what gets reported.

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- Dana York: the states produce the data to feed the model. Our role is to make recommendations that can help the data achieve the principles and increase confidence in the data.
  - Jeff Sweeney: we need more confidence because there is increased scrutiny of this data.
- Mike Gerel: sees two levels that are important here: first, counting widgets, and then checking the program that implemented them.
  - Dana York: summarized as how the data can be the best it can be, and what is the system that makes it the best it can be.
  - Rich Batiuk: that is my understanding. The wider circle of performance and water quality results is something for the parking lot and to bring to the attention of the Partnership.
- Rebecca Hanmer: we need to discuss what level of verification to impose on voluntary non-cost-shared practices. We can break practices down to three categories: ones regulated under NPDES permits, practices that are cost-shared, and activities that are non-cost-shared.
  - Dana York: There is voluntary information coming in, at least for ag in VA and MD, and the states stipulate that it has to meet a standard.
- Dana York noted the time and the change in the agenda. She called for the panel to reconvene for its work session after a short break. She thanked everyone for their time and input.

Panel Only Work Session

Adjourned Day Two

Participants

Name	Affiliation
Panelists	
Dana York, Chair	Green Earth Connection LLC
Curtis Dell	U.S. Department of Agriculture (USDA), Agricultural Research Service
Mike Gerel	Sustainable Northwest
Tim Gieseke	Ag Resource Strategies
Rebecca Hanmer	Retired
Dianna Hogan	USGS, Eastern Geographic Science Center
Richard Klein	Community and Environmental Defense Services
Tom Simpson	Water Stewardship, Inc.
Rebecca Stack	District of Columbia Department of Environment
Robert Traver	Villanova University, Dept. of Civil & Environmental Engineering
Dan Zimmerman	Warwick Township (via teleconference)
Panel Staff	
Rich Batiuk, Coordinator	U.S. EPA, Chesapeake Bay Program Office (CBPO)
Jeremy Hanson, Staff	Chesapeake Research Consortium/CBPO

Invited Experts and Workgroup Representatives	
Brian Benham	Virginia Tech University
Denise Clearwater	Maryland Department of Environment
Sally Claggett	U.S. Forest Service/CBPO
Olivia Devereux	Devereux Environmental Consulting
Mark Dubin	University of Maryland/CBPO
Norm Goulet	Northern Virginia Regional Commission
Dean Hively	U.S. Geological Survey (USGS)
Roy Hoagland	HOPE Impacts, LLC
Debbie Hopkins	U.S. Fish & Wildlife Service/CBPO
Neely Law	Center for Watershed Protection
Mary Ellen Ley	USGS/CBPO
Susan Marquart	USDA Natural Resource Conservation Service Pennsylvania State Office
Matt Monroe	WV Department of Agriculture
Kelly Shenk	U.S. EPA Region III
Tom Schueler	Chesapeake Stormwater Network
Tanya Spano	Metropolitan Washington Council of Governments
Jeff Sweeney	U.S. EPA CBPO
Ning Zhou	Virginia Tech/CBPO
Other Meeting Participants	
Nick DiPasquale	U.S. EPA CBPO
Alison Fairbrother	Public Trust Project
Matt Johnston	University of Maryland/CBPO
George Onyullo	District of Columbia, Department of Environment
Ted Tesler	Pennsylvania Department of Environmental Protection
Hank Zygmunt	Resource Dynamics, Inc

Attachment A.

Basinwide BMP Verification Framework Schedule

Framework Review Process*

August 28-29: CBP BMP Verification Review Panel meeting

September 16: CBP BMP Verification Committee meeting [**Panel Recommendations Presented**]

October 14: CBP Water Quality Goal Implementation Team conference call [**Panel Recommendations Presented**]

November 12: CBP Management Board meeting [**Panel Recommendations Presented**]

Framework Approval

Dec 2013/Jan 2014 TBD: CBP Principals' Staff Committee meeting [**Panel Recommendations Presented**]

Review of Jurisdictions' Proposed Verification Programs

Spring 2014: Jurisdictions develop their enhanced BMP tracking, verification, and reporting programs and provide expanded documentation through their existing quality assurance plans

Summer/Fall 2014: CBP BMP Verification Review Panel meets with the jurisdictions and review their proposed enhanced BMP tracking, verification, and reporting programs

Approval of Jurisdictions' Proposed Verification Programs

Fall/Winter 2014: CBP BMP Verification Review Panel presents the Principals' Staff Committee with its recommendations on the jurisdictions' proposed enhanced BMP tracking, verification, and reporting programs

* Review process will also include briefings for Partnership's CBP Scientific and Technical Advisory Committee (September 17), Local Government Advisory Committee Meeting (September 26-27), Fisheries Goal Implementation Team Executive Committee (October 21), Habitats Goal Implementation Team (October TBD), and Citizen Advisory Committee (November 14-15).