Non-Cost Shared BMP Development Decision Check List

Below are 14 steps to consider when developing state protocol systems. Under each step are questions for your consideration.

1. **Determine what to collect:**
    a. Do you want to collect: all BMPs that were agreed to in WIP, some other combination?
    b. Do BMPs, meet NRCS, CBP, or state standards?
    c. Are BMPs a functional equivalent (do not meet NRCS, state, or CBP standards but do have nutrient or sediment reductions)?
    d. When Collecting BMPs do you have the year they were implemented?
    e. For cover crops to do you have species, date planted, kill down date, fertilization if any?
    f. Have the BMPs been accepted by Chesapeake Bay Program for use in the Watershed Model and gone through the Chesapeake Bay Program's BMP Protocol Process? If not, do the BMPs have CBP provisional acceptance status as an interim BMP?
    g. Are the practices you plan to collect worth the cost of collection?

2. **Determine where to collect:**
    a. Depending on the BMPs you choose to collect- will you be these on the county level or on a watershed level? Does the whole state need to be canvassed or only certain areas or partial counties?

3. **Protocol (How to Collect):**
    a. What system have you decided to use to collect BMPs (see data collection options chart)? Will your system of collection change throughout time?
    b. Is the system of collection change throughout time?
    c. What is the cost benefit ratio on the system selected (HI, MED, LO)?
    d. Do you have current funding for the system?
    e. Do you plan to collect BMPs in the selected areas only during certain seasons of the year, throughout one fiscal year or will it take several years?
    f. Has your selected system been approved by the people who will be collecting the BMPs (i.e., Districts), local and state leadership, farm community, special interest groups, USDA/EPA or other federal entity if necessary?

4. **BMP verification system development:**
    a. What system will be used for verification? Does it require: trained district; other trained specialists; farmer self certification; or technological expertise (aerial photograph interpretation)?
    b. Has your selected system been approved by the people who will be collecting the BMPs (i.e., Districts), local and state leadership, farm community, special interest groups, USDA/EPA or other federal entity if necessary?

5. **Training on selected data collection and verification systems:**
   a. Do you have written guidance and documentation on the data collection and verification systems?
   b. Who do the data or verification collectors call if there is a question?
   c. Do data collection personnel and/or farmers need training and how will it be conducted?
   d. Is there a certification requirement for anyone who collects data?

6. **Use existing electronic data collection system update or develop new system:**
   a. Does the electronic data collection and storage system exist or do you have to build a new one or make adjustments to the existing system?
   b. What is the cost to develop the system and do you have funding?
   c. How long will the system be viable (due to technology or other changes)?
   d. What is the ease of use for the data and verification collectors?
   e. What is the ease of use for the landowner (if applicable)?
   f. Where will the data be maintained?
   g. Is the system mapped to provide the data through NEIEN to the Chesapeake Bay Program? Who will transmit data?
   h. How will you update the data in the future and remove BMPs that are no longer in existence, expired, no longer in use or not being maintained?
   i. Does the electronic system have standard reports that can be provided to leadership or others if requested or will someone have to build reports?
   j. Have you taken into account BMPs that may have more than on funding source so that you do not have double counting?
   k. Is the data available to the public? Do you have FOIA or 1619 protection of the data?

7. **Training on data entry:**
   a. Will the training on the selected data entry system be given by: reading documentation or guidance documents; group training; net meetings; field training; etc., or any combination?
   b. Will there be a certification requirement to use the data entry system?
   c. Will training be required for the landowners (if they are entering data)? How and when is the best time to conduct the training? Will there be a certification requirement for farmers?

8. **Pilot of collection, verification and data entry systems:**
   a. Where will the state pilot the data collection and verification systems?
   b. How long will the pilots(s) take?
   c. Who will be involved in the pilot (s)?
   d. How will debriefing be conducted to determine pilot success and/or system changes needed after the pilot?

9. **Reliability and validity testing:**
   a. Reliability assures that every time you ask the data collection question, you get the same answer. How will you test this?

b. Validity is when you compare what you collected to another system of collection, to see if you get the same or a similar answer. How will you test? (Example: looking at the same data in another system like the Chesapeake Bay Program's Bay TAS and ChesapeakeStat, CEAP.NASS data, etc.)

10. Adjust systems and training:
    a. After testing the systems, how will you implement adjustments you have to make and are there documentation changes, system changes or retaining involved in making the changes?

11. Communication Strategy:
    a. Do you need to prepare and conduct communication strategies for: the data collection event; landowners; local, state or federal leadership; general public?
    b. How will information be provided; written, electronic, news or media public meetings or any combination?
    c. Do you want feedback about what you propose to do before you start the process?
    d. Will you make changes if you accept feedback?
    e. Will there be communication of findings throughout the process or at a specific time in the process?
    f. Who does the landowner or general public call if they have questions?
    g. Will there be a published document of the findings our outcomes of the collection of BMPs?

12. Implement data collection and entry and verification systems:
    a. Reliability assures that every time you ask the data collection question, you get the same answer. How will you test this?
    b. Validity is when you compare what you collected to another system of collection, to see if you get the same or a similar answer. How will you test? (Example: looking at the same data in another system like the Chesapeake Bay Program's Bay TAS and ChesapeakeStat, CEAP.NASS data, etc.)
    c. Will a system problem cause changes in how the system is used, documentation, output of data, timeline for collection, etc.

13. Reliability and Validity Testing after Change to the System:
    a. Reliability assures that every time you ask the data collection question, you get the same answer. How will you test this?
    b. Validity is when you compare what you collected to another system of collection, to see if you get the same or a similar answer. How will you test this? (Example: looking at the same data in another system like Chesapeake Bay Program's Bay TAS and ChesapeakeStat, CEAP. NASS data, etc.)

14. Future Year Systems:
    a. How often will you collect data?
    b. How often will you verify that the practice is still in existence?
    c. How will you remove practices from the database that are no longer in existence, have expired, are no longer in use or are not being maintain?

d. If you do an intensive on the ground collection do you need to do the same thing in future years? How often?
e. How would you change the system if you go to a less intensive system and does it have approval? (local, state, federal, Chesapeake Bay Program, etc.)
f. If you use a different system in the future, have you gone through all of the above steps?