

Agricultural BMP Engineering Workgroup Agenda  
Department of Forestry, Cafeteria  
Charlottesville, VA  
May 9, 2017

- 10:00 AM-Introductions
- EJAA
  - Schedule update
    - § *Only have Mountain Castles, Natural Bridge, Mountain, and about 12 far eastern district left to schedule*
    - § *Schedule right now goes through the end of June with several scheduled*
  - Transition Plan
    - § *Once General Assembly did not approve engineering positions for the 2<sup>nd</sup> time, we asked Emily Nelson to investigate the issue.*
    - § *There are two documents for discussion:*
      - *Justification document-outlines why we feel DCR's EJAA program should not be a licensing issue with DPOR*
      - *Transition plan and timeline*
    - § *Really two issues/questions for DPOR:*
      - *Can DCR issue EJAA*
      - *Make sure we are clear on their interpretation of the ag exemption*
      - *We would like their feedback on the third issue of the program structure*
      - *We will develop two documents for the DCR EJAA program, Guidance document that goes to the board, and large manual that does not*
      - *Talk to OAG before DPOR*
- Stream Pickups
  - *Discussion on septic tanks as reservoirs. Only reason it is in the design note not to use them is because the person who developed that is in SW and they need shallow plastic reservoirs because of bedrock. It is ok to use septic tanks as reservoirs for DCR VACS projects.*
  - *Need to install a French drain to keep the reservoir from floating, concrete alone in lieu of plastic will not prevent that*
  - *What should the stream criteria be for selecting a suitable stream?*
    - § *Locate in a laminar location, far enough upstream of a riffle as to not push sediment into collection box*

- § *Make sure there is enough water during the dry part of year. Check flow in the dry time of year like you would a spring development*
  - *Should geotextile be installed on the d/s side of the collection system too?*
    - § *No one had a reason to do so*
  - *What should the width and depth of the #57 stone be?*
    - § *Would be dependent on the site*
    - § *Make sure you don't have any sand wedges or something below the collection system, need to do your soils investigation*
  - *Does 12" of gabion seem reasonable?*
    - § *Yes, calculate like you would as a stream crossing. Put a note in that you have to include the stream profile and calculate bank full velocity. Specify minimum of 12" of 4-8" stone.*
  - *Gravel bottom vs concrete bottom*
    - § *Based on soils investigation*
  - *Talked about different configurations for the clean out*
  - *What about pumping directly from collection box?*
    - § *Is the stream enough for the supply? Reservoir would allow for recharging of collection system?*
    - § *Risk of pumping sediment.*
    - § *Can use a second well casing. All the sediment is trapped in the first well casing, eliminates reservoir, but not for a large herd.*
    - § *Pat has pumped directly from the catchment, uphill to a reservoir which gravity flowed to troughs.*
  - *Next one will be for pond pickups, Raleigh will work on something for the subcommittee to review and have it for discussion at the next meeting.*
  - *Would like to develop a flow chart for decisions on the selection of water sources, will try to get this done by Graves. Once subcommittee finalizes the document it will be circulated to entire group via email.*
- *Need to send out some type of guidance on reservoirs (note this does not mean an official guidance document that would have to go to the SWC Board, rather a document that details what types of materials may be used for reservoirs)*
  - *Will do an email to technical contacts list*
- *Training*
  - *Graves*
    - § *Drop structures and grassed waterways am*
    - § *Pump industry rep, water source selection, NRCS standard changes pm*
  - *ICE*

- § 2017 success!
- § Process for District staff selection
  - A list is kept that includes all district technical staff who have never been to ICE. The list is prioritized by DCR Engineering staff as well as the CDCs. The top 8 are chosen and the rest go on a backup list. The backup list is offered spots as they become available and will carry over into next year.
- Other Regional Trainings
  - § Water budget, this will be covered some at Graves, but not everyone goes to graves
  - § Do a series of training that includes water budget, well yield vs pump rate, watering systems.
  - § Watering systems/water budget Culpeper, Farmville/Southern Piedmont
  - § Survey training in east, maybe engineering 101
    - Scaling
    - Quantities
- Topics for website content
  - § Looking for short video ideas for ag bmp training, have a meeting with PCO Thursday
  - § Parts of a stream, survey for a stream crossing, where to locate a stream crossing
  - § What to look for during construction
    - Excavating for trough pad
    - Quality of materials, ASTM number
  - § Choose stuff they can't take a training class for
  - § Shoot them with the intention of showing them to a farmer who is going to do his own contracting
  - § Engineering 101 stuff, working through materials and narrating what they are doing, drawing something to scale
  - § Pressure system worksheet
  - § Computing manning's values, why to calculate full bank velocity
    - Jon at DEQ has some of these already done, maybe we can borrow
  - § Tying into existing well and doing a yield test
- TAC
  - Accepted most of our proposed changes, did not want to remove 390 (Riparian Herbaceous Cover) from SL6
  - Deadline for suggested changes, May 31<sup>st</sup>
  - 1<sup>st</sup> meeting June 14th

- *Any items from the EWG?*
- Standard Drawings
  - Issues with AutoCAD
    - § *Ask VITA*
    - § *UPDATE-after the EWG meeting, the DCR IT Director found the source of the problem and the drawings should now function fine.*
  - *NRCS Area I drawings*
  - *Add drawings to website*
    - § *Establish Subcommittee*
      - *Sara Bottenfield-Chair*
      - *Pat McIlvaine*
      - *Amanda Pennington*
      - *Raleigh Coleman*
- Survey Equipment-Potential for District Share
  - *Making survey equipment available for district to share in the case of districts not having any*
  - *What about GPS units. We would pick something acceptable and provide the information to the Districts for them to buy if they wish to.*
  - *Emily will research GPS units*
- New Topics
- 3:30 or earlier-Adjourn

**Please note we will break for lunch where convenient**