

## **SITE VISIT 1: August 28 at the State Farm DOC property in Powhatan,VA**

Attendees (10): Amber Ellis, Brock Reggi, Emma Hoerichs, Joey Shelton, Colton Sullivan, Lindsay Spotts, Louise Finger, Luke Moore, Patti Nylander, Brandy Snyder

### Site Condition Notes:

- The group walked a good distance along the main creek as well as smaller tributaries.
- Areas of goodness were pointed out where vegetation was starting to grow on eroded bank.
- In areas where there is still active erosion, it was advised to install fencing greater than 35' away to give stream more space to stabilize.
- Noted soils more cohesive on this site, so not shifting as much as it could, which is a good thing.
- Could cut live stakes from Black Willows on site and install along bank where cowpaths or other bare areas are (after fenced out).
- In one area there was a large slab of concrete, a cattle gate, and other materials in the middle of the stream. This is causing the water to cut the banks on either side. Was recommended to remove this slab to allow stream to flow and not erode banks.
- Has buffer with mature trees and not eroding quickly.

### Recommendations:

- Recommend fencing out cattle and establishing buffer. Larger buffer widths in areas where there is active erosion to allow stream more space to stabilize.
- Remove concrete slab/fence contraption from stream to restore flow of stream.
- Live staking in cattle crossing areas (after fenced out) or other bare areas that would accept live stake planting. Can use willow source on site.
- Evaluate road-crossing structural stability and evaluate existing fish passage at the crossing: ideally replace with a full AOP crossing.

Evaluation for Streambank Stabilization Funding: Given site conditions, the level of incision, existing mature buffer, and other constraints, this site is not a great fit for the Consortium streambank stabilization funding.

- Pros
  - Well established team of professionals already working on projects at the farm.
  - Public land, no concern with change in ownership, installed practice will likely stay in place
  - Already some "nuggets of goodness" to build on. Established vegetation, just need to exclude the livestock to see some level of improvement.
  - Drainage area to stream is all within the same property.
- Cons
  - Not a great site for public demo give that it's a DOC property.
  - State procurement rules can create hurdles to work completion within grant timeline.

## **SITE VISIT 2: August 29 at a private property in Woods Creek Watershed in Lexington, VA**

Attendees (15): Amber Ellis, Barbara Walsh, Brock Reggi, Catherine Siegel, Charlie Simmons, David Rosher, Gus Wilkinson, Jared Conner, Chris Wise, Leslie Ayers, Lindsay Spotts, Louise Finger, Karol (landowner), Sammy Vest, Sandra Stuart

### Notes:

- Landowner noted interest and willingness to stop mowing up to creek edge, but was concerned about grass height ordinance in Lexington. Other participant noted that there is new exception for wildlife, and others noted that these mowing rules do not typically apply to riparian areas.
- VCAP potential for supporting planting/design costs
- Noted utility line above, so would need shrub or small tree
- Landowner has landscape plan that she can provide
- Amber shared example of urban buffer <https://jamesriverconsortium.org/lodge-creek/> for inspiration
- RACC noted that Woods Creek has been a focus of theirs. This would be a great site for a demonstration project that other residents could learn from. Site very visible at the corner of two roads.
- Potential design challenge with sewer line crossing just above road

### Recommendations:

- Survey and site analysis needed to determine best design needs and cost.
- Preliminary recommendations included grading back the bench, stop mowing up to creek edge, and plant woody shrubs in riparian areas.

Evaluation for Streambank Stabilization Funding: Given the low bank-height ratio, good conditions upstream, and other site conditions, this site could be a great fit for the Consortium streambank stabilization funding and would be recommended to move forward with next steps.

- Pros
  - Channel appears stable and vegetated upstream
  - Low bank-height ratio
  - Willing and passionate landowner
  - Partnership possibilities: VCAP potential for supporting planting/design costs, RACC
- Cons
  - Overhead utilities and utilities crossing channel

### **SITE VISIT 3: August 29 at Hope's Legacy Equine Rescue in Afton, VA**

Attendees (11): Aaron Wendt, Amber Ellis, Anne Marie Roberts, Devon Hathaway, Emily Ferguson, Maya Proulx, Laurel Williamson, Louise Finger, Patti Nylander, Sammy Vest, Brock Reggi

#### Notes:

- Area that we spent the most time at had erosion, but limited space at the top of bank for grading due to fence.
- Narrow valley with working farm, and narrow buffer with newly installed fencing close to buffer.
- Highly incised channel, which is systemic issue in the whole Mechums watershed.
- Landowner did note that it was less incised below road crossing. Another site visit to ground truth could be useful.
- Several tight meander bends appear to be actively migrating, suggesting that the stream is seeking to create a floodplain within the existing channel.
- Stream really needs full valley to stabilize or to restore. Current land use limits space to work with.
- Previous live staking seemed to be pretty successful and could continue adding livestakes. However, considering which areas are better suited for high density planting; and which areas a staggered or one-sided approach may serve the system better long term.

#### Recommendations:

- Develop a long term plan to move farm use activity from riparian area to give stream more space to stabilize.
- Connect landowner to Brock Reggi with DEQ to identify high predictable instability areas and recommend activities to do now (i.e.strategic live staking) and explore mitigation potential for the property.

#### Evaluation for Streambank Stabilization Funding:

- Pros
  - Engaged landowner/farm manager, very interested in doing something to improve water quality on the farm.
  - A project would be somewhat visible, opportunities for field trips, show and tell.
  - May be able to show different restoration strategies over time (first were the live stakes, then another practice, then another)
  - Likely a volunteer base to help with project installation, excluding heavy equipment work.
- Cons
  - Is there a level of meaningful work that fits the budget? Full blown restoration could be \$2 million+, whereas adding some more live stakes would be minimal.
  - Some work may be limited due to existing infrastructure (pasture fencing and wooden bridges).
  - Stream may be too incised to perform level of grading needed and still stay within the budget.
  - Super narrow valley doesn't allow access to floodplain AND pastures for the farm