

Severn River Association Minutes

Board of Directors Meeting Tuesday, December 18, 2012

The meeting was called to order at 7:05 p.m. by President John Wright

Guest speaker: Two guest speakers presented results of remediation efforts which have been supported by the SRA over the last several years.

1. Steve Barry, Coordinator, Arlington Echo Outdoor Education Center – Restoration of Flood Plain behind Veterans Cemetery in Arden.

This area is just upland of and drains into Cypress Branch (CB). In 2007, The SRA was awarded a grant to restore Atlantic White Cedar (AWC) to CB. AWC is an excellent carbon filter & likes wet feet, but the original stand had been wiped out by erosion and sediment from overloaded and failed storm drains – the main outfall failed in 1972. The SRA's restoration project would have been part of a much larger project funded by the SHA and AACo DPW which would redesign and repair the failed outfall.

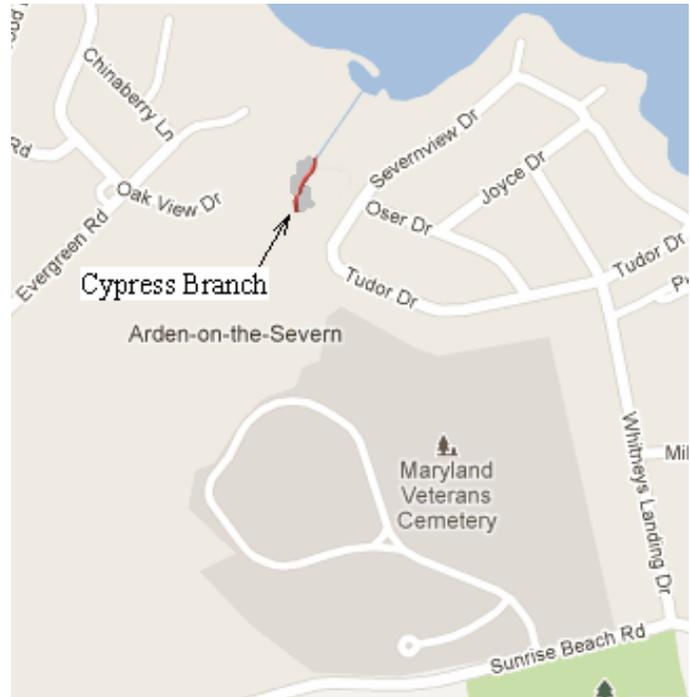
The area behind the cemetery looks like the Grand Canyon but muddier. The SRA, led by Duane Wilding and Charlotte Lubbert, proposed a state of the art fix to area behind cemetery, similar to the step-pool conveyance system proposed for the Evergreen Road outfall. Some funding was provided by the owner of the property at 1126 Severnview Drive, and some was from a TEP grant from SHA, with the balance from AACo. Keith Underwood designed a system, but AACo delayed implementation to study lower-cost alternatives. A new development nearby used a similar outfall but onto AstroTurf, with a 24" pipe down the hill to what was originally a single step pool but was changed to a series of step pools. This system works pretty well, but needs an armored hillside (large rocks) to control erosion. Over 3000 plants were planted by students, all native. The plan originally called for 15,000 AWC saplings, but only 150 were actually planted. Others have gone to other projects, only 2000 remain in the nursery at Arlington Echo. The system now works properly with no significant erosion or sedimentation even in large storms. The plantings remove nitrates which had been washed into the Severn. The plantings included Sweetgum Magnolia which was also native to this area. Acidic soil creates a stable bog. AWC are not salt tolerant, but are thriving because of frequent fresh-water flushing.

Sally Horner mentioned that AWC are also better about dropping needles, again helping to stabilize the bog.

2. Bob Whitcomb + John Flood – Horn Point Shoreline Restoration.

SRA requested and received a grant from CBT to partially fund this project, with most of the funding being provided by the landowners. The landowners provided before and after pictures. Two property owners were involved – one property sold which delayed the project. The original seawall was creosoted lumber with no filter cloth, and now has holes. The previous owner added rubble with no liner behind the holes. The holes are still eroding. Several hundred feet of beach has already disappeared. Hardening the shoreline removed replenishing sand & caused the beach to disappear. The hard wall reflected waves & accelerated erosion. Material went into Spa Creek. The area had good kayaking but was inaccessible.

The Goal of the project was to absorb waves, not reflect them, and create a marsh and a place for horseshoe crabs & terrapins to lay eggs. The clay layer below is loaded with phosphorous and nitrates, which is now going into the bay. The plan was approved by MDE and the Army Corps of Engineers. The project added breakwaters to form tidal pools, and removed the wall. For maximum wave effectiveness, the circumference of pools was made equal to the fetch length of the waves. Two types of plants were planted – Cordgrass in tideline and Switchgrass above the tideline. Plants were planted on 12"-18" grid. The new beach turns the wave energy and absorbs it on the slope. The sand forms a dune with a pool inland. The pool is an integral part of the design, to absorb high water from storm surges.



Debris from storms should NOT be cleaned up – let it rot and it will feed the grasses, so the grasses then lock it in. It takes 2 or 3 years to establish the marsh, and it will provide food for wading birds. It will also have fewer algae blooms and clearer water because the plants absorb nitrates and phosphates, which is good for osprey and shore birds. Fine sediments still contain seeds of underwater grasses – these need grinding action (scarification) to germinate seeds. The shoreline is now rebalancing – there is another living shoreline downstream, but bulkheads in between. Those landowners were skeptical but are now converts, having seen the results so far and the great improvement. Those bulkheads are now failing, so the owners are looking carefully at the performance of this system. The Living Shoreline for the Petit property had to stop at the property line because the neighbor wanted to keep his bulkheading. A return had to be added to keep sand from going next door. Those should be eliminated some day. There is much less wave action with the living shoreline because there is no reflection of waves. It serves as a model, and provides kayak access to the cove and the river. The vacant lot next door now also has a living shoreline.

Questions:

Gene Barry noted that the last hurricane improved most living shorelines, and asked how this one fared? John Flood advised that it worked well, but needed some work to replace some plantings because there had not been enough time for them to become well established – they don't provide immediate cover. Intertidal marsh is key. Must have opening for drainage.

How big does a Living Shoreline have to be to be effective? Small projects sometimes work, but bigger is better – generally need at least 3 consecutive properties.

One objection to Living Shorelines is that they take public water to make private beach since private property is public below the high tide line. For this reason, they should not go out any further than necessary; It is also cheaper to not go into deeper water. They should have a 2:1 slope in front and 1.5:1 in back. Shallower water also helps SAV grasses come back further out. The small loss of public shoreline is outweighed by the public benefit of better water quality and wildlife habitat with kayak access.

Bob Whitcomb noted that this was the first Living Shoreline project on private property to be awarded a CBT grant. CBT held a major press conference on this property to announce a major new program to duplicate this elsewhere. John Flood said the property owners deserve much credit for not just re-bulkheading. Education is the key. We now know what works, and just have to do more of it. Andrew Petit, the property owner, noted that the grant money covered less than 20% of the cost. It was a nice sweetener, but was not the reason to do it. His neighbors were constantly backfilling their bulkhead, and they wanted something more natural and maintenance free. Tom Smith in Annapolis started them on this path. It took about 2 years from first plans to construction, including 8 months wasted talking to his neighbor about participating. To obtain the neighbor's agreement, Andrew had to agree to fix the neighbor's bulkhead if this project hurt it. Now that the project is complete and is working, the neighbor loves it and is considering replacing his bulkhead with a Living Shoreline.

MDE is reducing the processing time – they used to sit on Living Shoreline applications because there is no fee as there is for a bulkhead. AA County now prohibits bulkheads – must use LS or revetment. CBT offers 25% of estimated cost to encourage Living Shorelines.

The Petits added an Osprey pole as soon as the Living Shoreline was finished, and had an osprey nest within a week. The nest was damaged by hurricane and the osprey rebuilt it. No eggs were found the first year – the bird just claimed this territory. A Heron has also moved into the new cove.

Business Meeting:

Minutes of the November Board Meeting were Approved AS AMENDED (date of next mtg was corrected).

Treasurer's Report – Treasurer Lynne Rockenbauch presented new budget attached. It reflects an earlier Board decision to spending down our reserve fund to 2.5 years of annual operating budget, using the excess funds to promote restoration, education, membership and other SRA priorities. Ann Jackson noted that the Stormwater Action Fund has a new application for \$1k to design a project.

Old Business:

- Dick Spencer reported that we are now monitoring approximately 24 sites in west county. There was one report of inadequate cover which is being addressed. We need more volunteers for that and for stormwater BMP inspections. The construction site process is working, but needs a leader and a

committee. We have a possible leader, but it is not yet confirmed. For BMP inspections, we have had several conversations with AACo and have submitted a draft plan, again following CEDS (Richard Klein)'s lead. We are working with a group of communities to set up a process. Belvoir Farms was the first test. AACo participation helps them get EPA funding. Waverly Farms is next – Duane Wilding reported there is no decision yet – we have offered to help them solve problem but they have not yet accepted.

- Ann Jackson reported on SRA's Stormwater Action Fund – this year's budget is not yet spent. There is one applicant now and more would be welcome. The Fund helps with both designs & construction. So far they have aided 3 designs, but none have gotten grants to build. The committee is considering holding workshops on how to apply for grants, possibly using unused budget funds to hire a workshop coordinator. They have improved the SRA website SAF page. Lee Meadows has a suggestion for a workshop coordinator with a good track record. Inputs are welcome.
- The next edition of the Log is at Free State Press now.
- Lee Meadows – decals are in the mail with the membership letters. In the Spring, we will do 4 test mailings of 1,000 each to boaters, waterfront property owners, and SRA communities. We hope to increase our annual operating budget to about \$120,000. We are also trying to recruit volunteers for grant writing, Project Clean Streams, and Publicity. Chris Martin will do some of that. Community Clean Marina certification is also being promoted. Saefern is the first community to get certification, and their experience is being used to put together a package of how to do it, distilled from the official DNR requirements. Dick Spencer suggested we also involve non-waterfront communities in the watershed.
- Bob Whitcomb – Jonas Green Park project – we didn't spend the full \$1,000 budget. The signs are almost complete –thanks to Sally Hornor for writing & translating the signs. We hope to finish the design by 12/31, then send out for construction.
- Operation Clean Stream – Maureen Burke is working with Bob Whitcomb for next year's cleanup. The date is April 6, 2013. The site is not selected yet – we have 2 candidates but no permission yet. Dick Spencer asked if there is potential for outreach to communities for site selection? Bob Whitcomb has already stuffed many community association mailboxes with flyers. Dick would like to get all member communities to clean up their own streams on the same day. AACo does provide dumpsters. Publicizing that is good. Bob Whitcomb expressed concern that such coordination may overwhelm AACo collection equipment. Our 50 volunteers get good results. Alliance For CB wants to change to Project Plant Stream – running out of trash. We're not there yet – maybe in 2 or 3 years. Good for younger volunteers.
- The SRA received the 2012 Environmental Award from the County Democratic Central Committee on December 6th. Presented by Sarah Carter. Signed by all AACo Councilmen. Ken Hatch represented us.
- Priest Point – the developer is still getting AACo approvals. No change since last meeting.

New Business:

- Community News – Charlotte Lubbert – She and Mike Robinson and Richard Klein walked behind the property of Strayer Business School and B&B Refrigeration. The area is very deteriorated – drain pipe scoured out, with major erosion from the outfall. The bank is falling down, dumping sediment to destroy our restoration project. CL & MR have pictures. Duane Wilding suggested we tell Coastal Resources about this. Dick Spencer said we had contacted them and set up a meeting but they pulled back. Rte 32 & I-97 drain into Severn Run. Probably SHA responsibility.
- New member – Cindee Funk used to live in Carrollton Manor, but has now moved to Arden (which is represented by Mike Robinson). She usually attends Sierra Club meetings on the 2nd Tuesday each month..
- Crystal Spring – hasn't yet applied for permits. Adjacent to Reserve at Quiet Waters – they are resubmitting. Both are in the South River watershed. Dick Spencer felt we should leave it to South River Federation who are working closely with the developer to make it a good project. Crystal Spring developer has agreed to mitigate adjacent properties stormwater which has been a long-standing problem.

Meeting Adjourned at 9:00 PM.

Next Meeting: will be on December 15, speaker to be announce.

Respectfully submitted,

Bob vom Saal