

Severn River Association Minutes

Board of Directors Meeting Tuesday, March 19th, 2013

The meeting was called to order at 7:14 p.m. by Vice-President Bob Whitcomb

2 Guest speakers:

1. Colleen Ruhter, P.E., Master Watershed Steward, NSA Annapolis Program Manager: *Stormwater Management at Naval Station Annapolis & The USNA.*

These two Navy facilities cover about 1200 acres of land, most of which drains to the Severn or one of its tributaries: College Creek, Spa Creek, Carr Creek, and Mill Creek. In addition to MDE Wetlands & Waterways requirements (Stormwater Management Manual and Construction Permit Process) and Critical Area Commission & Coastal Zone Management requirements, these Facilities must meet the requirements of NEPA (National Environmental Policy Act), EMS (Environmental Management System), ISA (Energy Independence Security Act) Section 438, Navy LID Policy, and Navy requirements for Hazardous Waste Management, Recycled Materials Management, Fuel/Storage Tanks Management, and LEED Silver equivalent buildings. Stormwater Management is a “significant aspect” of Naval District Washington Environmental Policy Training. Every project gets a NEPA review, and Navy EMS audits each Facility every 3 years. The Annapolis Facility has passed all audits.

Small projects are just given guidance on E&S control and requirements, but projects over 5000 sq ft or moving more than 100 cu yds of earth undergo a formal design review to assure compliance with MDE SWM requirements and MDE E&S requirements.

There are currently 30 Stormwater BMPs throughout USNA/NSA Annapolis, including 12 Bioretention / Raingardens, 1 Green Roof, 3 Pervious pavement/reinforced turf areas, 2 Infiltration Ponds, 4 Sand filters, 1 Vegetated Swale, 2 Cistern Systems (one 1500 gal system used for toilet flushwater and one with 6 rain barrels), 2 Enhanced Filters and 3 Stormwater Ponds. The pond near alumni hall captures runoff from the YP boat area and treats it through proprietary enhanced filters to take out small particles. **Question:** How is effluent measured? It is not, but the system manufacturer says it takes out 80% of the contaminants. The present Discharge Permit only requires a certain percent reduction, which the system exceeds. The new Permit will require the pollutants to be below maximum allowed limits. They have just recently gotten those limits on Oil, grease, Copper and Zinc, and are now evaluating measurement systems.



The 6 Rainbarrels are at Greenbury point, and some have been stolen. They cost \$130 each. Other systems shown above include an above – ground sand filter system and an in-ground filter system. A concrete swale near the firehouse has been replaced with wetland plants which work as sediment traps. Rickover Hall has a green roof.

They also have 3 Geothermal well-fields which save energy for heating and A/C, including a reverse geothermal system to cool computer lab.

There are 6 new Stormwater Management Projects under construction: 1 modified bioretention system; 1 reconstructed green roof system; 18 bioretentions and 6 – 5000 sq ft underground infiltration systems; 1 raised bioretention system; 1 Water Quality Bank use, and 1 CERCLA remediation site. The Permit for the berms & silt fence took a full year to get. The raised bioretention facility at the Visitors Center gave them about 4 acres of banked WQ which they used for Alumni Hall since it has no room for improvements.

There are another 9 Projects beginning construction or in permitting: 1 Degraded Outfall rehab projects (CPO, adding manhole & access for cleanout), 1 Degraded Outfall stabilization project, 10 Bioretentions, 4 permeable pavement installations, and 2 Infiltration berm systems. With these, they will have met all EPA requirements.

In addition, there is a project at the Perry Center which is 100% pro-active, including 1 CPO, 2 Outfall stabilizations, 1 bioretention facility, 2 rain gardens, and 3 permeable pavement sections. The Perry Center is on the west side of King George Street, where buses park.

Bob Whitcomb noted that the Perry Center is parking for utility vehicles also, and drained straight into College Creek, at the Maryland Archival center. He met with Colleen 2 years ago, and discussed the problem. He has seen the plans for the new system and it is a huge improvement. Bioretention will capture 2 acres of runoff, and put it and some other runoff into a large underground tank, where it is treated & infiltrated slowly into the ground. The project is at the permitting stage now. The high cost and lack of statutory requirement may make it a problem to implement under current budget conditions. Maintenance will be similar to the marina facility. The Marina was required because it is considered Industrial Discharge; the Perry Center is not so regulated.

Questions: Tom Guay asked if they plan to measure the effluent? No. Proof of effectiveness is not required – the permit just specifies 20% of the area is to be retrofitted. They agree that measurement would be nice, but it is not a requirement so there is no money available. The EPA should make it a requirement. The permit only requires Generic inspection. Lee Meadows noted that the EPA doesn't have the technology to measure effluent. Duane Wilding noted that some rules require visual monitoring. Colleen said the permits do require visual inspection to look for oil sheens. Dick Spencer asked if the MS4 permit requires recertification periodically? Yes, so the effluent quality is not completely ignored.

Possible Future Projects include

1. A large (40 acre) capture, treat & reuse project in the lower yard on the Annapolis side. This would be hard to tie in to historic buildings for toilet flush water, so it will instead be used for ballfield irrigation. Dick Spencer asked if the fields are fertilized? Yes, but only with fertilizers that cling, and only playing fields, not the practice football field. The baseball field is Astro turf.
2. Implementation of SWIP recommendations for 12 more BMPs.
3. Additional geothermal wellfields

Question: Gene Milgram noted that water in the Health Clinic came up several years ago – is the drain system a combined sewer / storm drain? No – there are no combined sewers left, but infiltration is sometimes a problem – storm water gets into the sewers and overloads the system.

The new MS4 Ph II General Permit has a number of new requirements:

1. Public Education & Outreach and Public Participation & Involvement (Environmental Bulletin Board, Middle School & USNA presentations & tours, Public Participation – pick up trash, plant plants)
2. Illicit Discharge Detection & Elimination (Comprehensive mapping and periodic dye tests for leaks)
3. Street Sweeping – at least 50% swept every 2 weeks.
4. An annual Site Inspection (by Colleen) of the entire facility and activity summary report to MDE.
5. MDE review of all projects 5000 sq ft or 100 cu yds
6. MDE random site inspections
7. Training at least 20 Green Card holders in the Public Works department.
8. Basic contractor training for E&S for smaller projects
9. Quarterly BMP inspections of Perry Center and YP Basin facilities, 48 hrs after major rainfall. Look for leaking drums, etc.
10. SWPPP (StormWater Pollution Prevention Plan) training for Marinas & Facility Maintenance personnel.
11. Developing a Spill Prevention & Countermeasure Control plan. Gene Milgram asked if this is why the Fire Department has a new HAZMAT truck? Not sure, but probably. There have been very few spills, and all small to date, less than 1 gallon.
12. Developing a Natural Resources Maintenance Plan covering Pesticide/Herbicide maintenance and a Tree Mitigation and Planting Bank. The Bank consists of 13 to 14 acres of trees to offset pavement. Gene Milgram asked if this is why a crane was planting trees from Gate 8 to Alumni Hall on the waterfront, and when was that approved? The crane and fence are probably a seawall project, not tree planting – the Plan is still under development.

If you have any questions or concerns, contact Colleen Ruhter, Stormwater Program Manager at 410-293-1026, or colleen.ruhter@navy.mil, and she will do her best to address the issue.

Kurt Riegel noted that much of the USNA is built on fill that was originally a wetland, and all the proposed remediation will never be as effective as the original wetland. It is, however, refreshing that the Navy culture has shifted from the old view that national security was more important than any environmental protection.

2. Erik Michelson, , Executive Director, South River Federation: *Development and the South River Federation.*

In 2005, the SRF's Goal was to achieve measurable improvement in the ecology of the South River. Their Objective for development was to reduce the amount of pollutants entering the river and its tributaries through improved monitoring and enforcement of sediment and erosion controls.

To further this goal, they filed a lawsuit against Parole Town Ctr for non-compliance. This consumed a great deal of time and resources, leading them to consider a more pro-active stance, so in 2008 this Goal was expanded to Achieve significant developer compliance with existing sediment and erosion control laws on sites that the Federation is able to monitor. The Objectives were similarly expanded to:

1. Train and deploy a team of volunteer construction site monitors.
2. Continue to put pressure on Anne Arundel County to do a better job of enforcement.
3. Work collaboratively with interested developers and third party monitors to strengthen compliance measures.
4. Bring citizen lawsuits where other measures to address egregious behavior have not been effective.

A good example of developer collaboration was the Village at Lee Airpark on Beard's Creek, which started the permit process in 2008-9 and was the first use of Environmental Site Design. The Lee Farm Conservancy, a coalition of neighboring communities, had been working with the developer to go beyond regulator compliance in terms of stormwater controls. The project preserved 20 acres of the farm property, some reforested.

Reliable Contracting worked with the SRF during the construction phase of the project to assure compliance. As a result, there were NO documented polluting discharges despite some of the wettest weather on record. Because of oversight from the Federation and a 3rd party monitor, the developer was very quick to act when potential issues arose, correcting problems before they caused pollution. Mid-construction, the developer changed a designed wetland basin into an infiltrating facility because of Federation feedback. This required modification of the development plans at some cost to the developer. With this positive response, the Federation gave the developer an award for environmentally-responsible design, and changed objective C to "Collaborate with developers to *exceed* regulatory compliance and strengthen compliance measures.

The 30 acre Bausum Property on Broad Creek is another example of successful collaboration. The property was zoned Open Space, but most of the usable portion had been used as a dump for over 40 years, which had severely degraded the stream systems bounding the property. The stormwater outfalls for an adjacent County Schools property were also completely blown out, further degrading the streams. At the urging of Councilman Cohen, we were approached by the developer to support the re-zoning from open space to commercial as the most viable way to clean up the property and restore the streams.

The developer, Saint Johns Properties, agreed to work with the SRF, with the following outcomes:

1. Additional high quality forest at the back of the site was protected.
2. A proposed pad site on 3-4 acres of non-dump was eliminated in favor of a second story on one of the other buildings.
3. The developer put up \$450,000 of their own money, matched by \$450,000 from MDE for stream restoration above regulatory compliance.
4. Based on model runs, the project will deliver significantly cleaner water post-development than it is now.
5. The developer paid \$30,000+ for a restoration plan for the entire tributary to Broad Creek.
6. The AACo Board of Education used part of the property for a softball field.

Question: Was the SRF a paid Consultant? No – all work was pro bono. They did get in-kind support to pay for studies, etc. Was the restoration work part of the Permitting process? No – it was a Gentlemen's agreement – Bausum lived up to all of their commitments and more. Crystal Spring has a Memorandum Of Understanding.

The Reserve at Quiet Waters on Harness Creek is an example of a more adversarial relationship with the developer. The Developer contacted the Federation to discuss the project. We met and I suggested that the project should be significantly scaled back to avoid proposed wetland and buffer impacts. The Developer balked at that suggestion but did offer to incorporate some suggested improvements to the stormwater plan. The Developer submitted a highly invasive site plan based on maximizing density (with an "affordable housing" bonus density). This is unacceptable to the SRF, so the Federation has testified at multiple city hearings against the project, raising concerns about wetland impacts as well as the possibility that the project could violate the

river's TMDL. We have also had initial discussions with the Chesapeake Legal Alliance about the possibility of grounds for a lawsuit should the project move forward as designed. We continue to monitor the project as it moves through the city's review process, and will continue to oppose such intensive and insensitive development.

Questions: Ken Hatch noted that Annapolis has stepped back and asked for a newer traffic study, so the project is now on hold pending further study and justification. The Developer said there will be **NO** impact on traffic. Diane Butler noted that the rejection by the Board of Appeals has been appealed to Circuit Court.

The **Crystal Spring** development in Annapolis on Crab Creek is presently a collaborative effort. The development had been granted annexation into the city in 2005. It's zoning is a mix of commercial and residential, shown as Coordinated Mixed Use (urban low front, clustered residential rear) in the Annapolis General Development Plan, shown at right. Urban Center Low is about the density of Parole Town Center or downtown Annapolis. The site is part farm now, but mostly forest. The Developer contacted the Federation about being an environmental advisor to the project.



Part of the property, and some of the area immediately surrounding the property, were existing, significant sources of pollution to Crab Creek. The outfalls of the NewTowne development and the adjacent school are the principal problems. Crab Creek has unacceptable water quality. **Question:** Tom Guay asked what is causing the pollution? Septic systems – most of that sub-watershed is outside of the city. Erosion and sediment are also a problem. Ken Hatch noted that the water table is high there, so property doesn't usually pass percolation tests. True. SRF is working with communities to fix. NewTowne 20 generated huge volumes of trash – is was an old development. KingsPort development construction also discharged a lot of sediment.



The Federation drafted a priority document to which the developers agreed, in principle:

1. Have a developed site that is delivering cleaner water to Crab Creek after construction than it did before (% improvement not quantified).
2. Protect large swaths of contiguous forest, critical drainage pathways, and wetland resources on the site.
3. To the extent practicable, utilize area within the property that is of lower environmental value as a priority location for development.
4. Ensure that in the end, there is no net loss of forest on the property and within the local watershed.
5. During construction, utilize sediment and erosion control methods that go above existing regulation and ensure that no sediment leaves the site.

Also included was the following “affinity” goal: Use this development as a catalyst to force Annapolis, Anne Arundel County, and SHA to the table to discuss the most effective way to make Forest Drive more functional. SRF is trying to get a comprehensive approach to development, not case-by-case 1.

These are only initial discussions, not a formal agreement. Over the 24 months the Federation has been



April 2011



December 2012

involved with the development team, the developer has consistently considered, and repeatedly acted on, suggestions to improve the project and be additionally protective of the environment. The present agreement includes hiring a 3rd party engineering firm to monitor the construction phase of the project; significant restoration projects on two tributaries to Crab Creek that do not carry runoff from the developed site; avoiding wetland impacts, including spanning the central stream valley with a bridge; forest conservation, including reforestation 1 for 1 (acre for acre) on the immediate site (the FC Act as interpreted by Annapolis) a Permanent Conservation Easement on 75 acres; and “over-managing” stormwater on site if it is feasible (the City of Annapolis has finally hired a stormwater engineer, who is now working with the developer). The developer has significantly improved the amount of forestation as a result of SRF input

Questions: Gene Milgram pointed out there were many parking lots spread out, reflecting a lack of urban planning. Erik responded that some of the original lots had been replaced with parking buildings, but agreed that more replacement would be desirable. Unfortunately, parking buildings are much more expensive than parking lots and this is the best they could get. The developer did add many rain gardens in the parking lots. The Annapolis GDP recommends “Residential clusters could be sufficiently intense to allow for housing that could be served efficiently with public transit and other City services, while maintaining the natural areas.”

Ken Hatch asked why we need another grocery store? Buses not appropriate for groceries. Erik answered that it is already zoned for that – the GDP states “A mix of uses is recommended for new development. Incorporating employment uses is an important part of this recommendation.” The commercial zone is still being designed.

Duane Wilding asked why the property was annexed initially? AACo didn’t allow development, so the landowner asked for annexation. Why not a park? Too expensive – no money was available to purchase it.

Diane Butler noted that 35 acres of the 75 acre easement was already RCA zoned.

Kurt Riegel noted that most past developments have been farmland, not contiguous mature forest. This takes most of that down. SRF participation has helped, but they appear to have gone beyond environmental protection and seemed to be advocating for the project at the last City Council meeting. Erik said that is true – they will support the project in return for significant concessions beyond the rules required by the City. Kurt noted that AACo would not approve development because there is no equivalence between new & old forest. The Developer talks about the CCRC facility, but it is really a major commercial and residential development of which the CCRC is only a small part. Why is SRF supporting this? Because they think it’s the best deal they can get. Concessions have been beyond what City requires.

Diane Butler noted that the Forest Conservation Act gives the City authority to say no development, but Annapolis doesn’t have pressure to use that discretion now because of SRF’s support. Other environmental groups would prefer SRF to take a lower profile. Erik responded that SRF didn’t feel that Annapolis would exercise any discretion. David Prosten of the Sierra Club voiced the same concern – SRF should have talked to other groups and not just acted independently, as the SRF endorsement undercuts other groups. Dick Spencer noted that this cooperation problem is endemic in environmental groups – there is often no communication or coordination. SRF’s work with the developer provides a model for how to work with developer. Odenton Town Center is much worse – why haven’t we objected? Steve Barry agreed we need to get our own house in order, not just criticize SRF.

Lee Meadows asked if we should be supporting changes in Annapolis laws to improve the process? Diane Butler said yes – her group has sponsored legislation to require a moratorium until the FCA advisory group can produce recommendations

Ross Garradine asked if the SRF had looked at habitat effects? Erik said not upland, but they have some stream information only. They have no funding for study of bird habitat, etc.

SRF had limited options they can’t stop development but have gotten concessions to improve water quality. Water quality has been stagnant but so has development. They are trying to use development to improve water quality. Lee Meadows asked if they anticipate improvement in TMDL after project? Erik said they hope so, but have no funding to model the effects of this development. They are trying to get funding for modeling.

Diane Butler asked if the developer has factored in the cost of TMDL compliance? Answer: The cumulative effect is all that counts, and the city is not really addressing amelioration. SRF is trying to get Annapolis to pay more attention to this problem

David Prosten of the Sierra club noted that CrystalSpring Annapolis.com is the developer’s website, and the CS Facts website offers an alternative viewpoint and information. Andrew Bing, the public outreach representative for the developer, will be happy to answer any questions or make a presentation to interested groups. Please contact him at ABing@KramerAssociates.net. Erik Michelson can be contacted at erik@southriverfederation.net

Business Meeting:

Approval of Minutes of the February Board Meeting was deferred to the April Meeting.

Treasurer's Report – also deferred to the next meeting.

Old Business:

- Kurt Riegel and Bob Whitcomb were appointed to the Nominating Committee, joining Bob vom Saal and Lisa Bender.
- Project Clean Stream is looking good for 4/6 – a flyer was passed around publicizing the Luce Creek and Maynadier Creek cleanups

New Business:

- Community News – None.

Meeting Adjourned at 9:20 PM.

Next Meeting: will be on **Tuesday April 16, 2013**, at Arlington Echo, with a presentation by Ron Melcer, Watershed Coordinator Chester River Association and Barbara Sharkey, President Corsica River Conservancy, entitled “*Successes and Initiatives On the Corsica and Chester River.*”

Respectfully submitted, Bob vom Saal