

Green Run Homes Association Consultations

Sept. 30, 2013

Eroding shoreline along canal is severe in many places. Green Run was considering coir logs. These will help temporarily, but should be used in combination with other methods. LRN contacted Jim Cahoon of Bay Environmental to request a site visit.

Visited with Jim Cahoon on October 21, 2013

Jim agreed that to truly fix the issue, the slope would need to be re-graded either back towards the houses or by adding fill inward toward the channel to produce a slope of at least 2:1 or 3:1. This would be extremely expensive to do throughout the whole canal. But, if you can determine a few places that are the worst, but have decent access for big equipment from land, you could do this there.

Another possibility to get this accomplished... talk with the City of VA Beach before they dredge and ask if they are willing to consider tacking on some work for dredgers while they are already in the channel with equipment. It would be FAR easier for them to do some re-grading from the water than to get equipment in by land in certain places. The city may be able to count any bank regarding for Green Run as a stormwater regulation credit.

They should especially be willing to re-grade the slope at the dredge platform area since they are using it. It is one of the worst spots I saw, but it has most potential because there is a lot of land there to grade landward. LRN can talk with the City about grading some banks while they are out there dredging, if you'd like. **If you'd like LRNow to talk with the city about this, we'll first need to know the location and schedule of dredging. Then we can help you plan where restoration should occur first.**

What you can do fairly cheaply to help "spot treat" the worst areas for now?

In places where there is a steep, vertical drop off of unvegetated bank, you can use a combination of "live staking", **coir logs, brush bundles, buffer plantings, and jute matting.**

Live Staking- do this in late winter or early spring- March

Cut 1 inch diameter pieces of Black willow (*Salix nigra*), silky willow (*Salix sericea*), silky dogwood (*Cornus amomum*), or Virginia sweetspire (*Itea virginica*) and stick the cut end directly into the bare soil bank. These will grow and take root, helping stabilize the bank. Placing a coir log beneath some of these areas after live staking them with would also help. Live staking can most easily be done by kayak or canoe.

Brush Bundles- this is best to do in March as well.

Brush bundles, or Contour Line Fascines, can be used instead of coir logs. You can find more info about fascines (p.34) and live staking (p.40) here:

http://www.cesvi.org/aaa-root/o/Erosion%20control_Tajikistan2013.pdf

Buffer plantings-

In places where it is possible, plant shrubs like wax myrtle (*Morella cerifera*), groundsel tree (*Baccharis halimifolia*), marsh elder (*Iva frutescens*), rose mallow (*Hibiscus moscheutos*) or Virginia sweetspire and other low-growing vegetation like jewelweed (*Impatiens capensis*) and native grasses. These will increase the root mass to hold soil and help soak up runoff from people's lawn and from sidewalks. It will be important to keep these shrubs pruned if they start to shade out grasses under them when they get much bigger.

Jute Matting-

If you decide to plant buffers or grasses on embankments that cannot be regarded to a gradual slope, you may need something to help stabilize the plantings. Grasses can be planted in holes cut in the jute matting, if necessary.

LRNow can help you find volunteers to help with these activities if you are interested. We also feel there is a lot of potential to educate and engage your homeowners by including them in these activities and possibly holding a few workshops at Green Run. A lot of erosion can be prevented in the future just by asking residents to re-direct gutter down-spouts away from their sloping backyards that lead into the river. They can use rain barrels to capture water runoff or make a flower bed under the gutter downspouts to soak up rainwater. They can even plant shrubs or flower beds along their back fences to catch rainwater running down their lawn toward the water. Please let me know if this is of interest to you and we can talk about details.

Thanks so much for helping protect the Lynnhaven River!

Meredith