



Committee on Sustainability Green Fees Project Interim Progress Report
This form is due 6 months after the notification of your project award.

Grantee name and email: Karen Duhring karend@vims.edu

Today's date: October 28, 2011

Project name: Floating Treatment Wetlands

Date awarded (semester and year): April 22, 2011

Amount awarded: \$8,000

Amount spent to date: \$7,425

Briefly describe progress you have made on your project:

The appropriate floating wetland sizes were determined for two locations, one at the VIMS Teaching Marsh and one at the main campus. Randy Chambers decided to change the original location at the Keck Environmental Lab to the "Grim Dell" pond for stormwater treatment analysis, with approval from W& M Facilities staff. The custom sized islands were ordered and delivered (invoice attached). This process took longer than expected due to a need for a sole source justification as only one vendor supplies this product.

The floating islands were not received until late August, 2011. We decided to postpone planting the islands until spring due to the hot weather in the remaining growing season, which is not ideal for successful wetland plantings. It will also allow more time for Randy Chambers and students to select the best wetland plants and to collect water quality data in the Grim Dell stormwater pond. The islands are now in storage at VIMS and the main campus waiting for spring planting.

Two students have begun collecting weekly water samples from Grim Dell to determine existing water quality conditions in the stormwater pond. They are analyzing temperature, conductivity, pH, total suspended sediment load, total particulate phosphorus, dissolved nitrate, ammonium, phosphate, and taking fecal coliform counts.

What remaining work needs to be done to finish the project?

We will finalize a purchase order for wetland plants for early spring 2012 planting. Weekly stormwater analysis will continue through the end of fall semester. This sample collection and analysis will continue at the beginning of the spring semester. Automated sampling of water throughout an entire storm event is also planned for Spring 2012 with inlet and outlet samples prior to installation of the floating wetland. The islands will be planted and deployed at both locations in early spring 2012 as soon as the weather conditions are suitable for new wetland plants.

A student will continue water quality analysis after deployment to compare the outlet water quality from Grim Dell before and after installation of the floating wetland to determine its effectiveness in improving water quality. No COS funds will be used for this water quality analysis.

No water quality analysis is planned at the Teaching Marsh for the VIMS floating wetland at this time. This part of the project will focus on evaluating the success of various plant species and outreach materials for visitors to the VIMS Teaching Marsh.

The remaining funds will be used for purchasing wetland plants, planting medium, anchors, and outreach materials.

Will you meet the deadline to finish the project (12 months after receiving award)?

Yes

Attach copies of receipts for funds you have spent so far. See attached invoice

Please email this completed form and scanned copies of receipts to Sarah Hanke, the Sustainability Fellow, at smhanke@wm.edu. Please do not print and deliver hard copies of this form and receipts.