JAMES MADISON UNIVERSITY

28 January 2011

Thomas A. Dingledine
Bluff Point Holdings LLC
P.O. Box 8336
Charlottesville, VA 22906

Dear Mr. Dingledine,

We enjoyed your visit on January 18 and the opportunity to have a conversation with you about your Bluff Point project along Chesapeake Bay. We appreciate the steps you are taking to ensure the project is environmentally sensitive and to secure baseline data. Your further interest in educational outcomes is to be applauded.

In a follow-up meeting, we discussed the various ways that students and faculty at James Madison University might use and interact with the site. Given our location, we are pleased with the interest of William and Mary in being the lead institution in a consortium. We would be interested in participating in the consortium.

An educational and research center at Bluff Point can serve as a platform for our participation in several ways. The center would be a destination for field trips and short courses, for example, an alternative spring break offering or a summer course. Bluff Point could be used for outreach to local schools and as a site for professional development for teachers in the area.

We see the opportunity to bring experiences related to Bluff Point and the Bay into middle school and high school classrooms. With our location and activities in the Shenandoah Valley, the center could be one vehicle in a larger view of the "Mountains, Valley and the Bay." If we

view the watershed as a whole system, then the Valley represents an area of sources to the Bay. Bluff Point would be one destination where students could see how the Bay responds as a sink for materials delivered to it from the Valley and other watersheds. Its location could connect students in the Valley to the Bay.

We would use the over-arching concept and data from Bluff Point and other sites in the Chesapeake Bay watershed. The goal would be to use primary data to allow students experience in working with data and to improve their investigative skills. We imagine using web-based materials and displaying data in programs such as Google Earth, with which we have considerable experience. We believe the approach of using local sites and others in the watershed and the Bay will be exciting to students and get them more actively involved in learning. We also suggest that it is important to include environmental stewardship as part of the approach.

The data would be used in training Earth science students and Master of Education students at the university. We would also use the approach in professional development for in-service teachers and provide opportunities for them to receive an earth science endorsement. We also would look for ways to bring materials into the 10th grade and 12th grade Biology curriculum.

James Madison University has strong linkages to K-12 schools in the region. We have a bridge program with Clarke County and a geospatial semester for high school students. The latter could incorporate data from Bluff Point. We see the concept of "Mountains, Valley and the Bay" as state-wide and allowing local and regional views that are tied to the health of the Bay. We think this approach would have considerable appeal to funding agencies such as the National Science Foundation and it would go well beyond the kinds of educational programming done around the bay by the Chesapeake Bay Foundation.

In addition to the ties to K-12 schools, we bring substantial experience in water quality monitoring in the mountains and a Smith Creek watershed project. Faculty at the university are also involved in studies of Shenandoah River fish kills and other environmentally related

projects in the Shenandoah Valley. We are in conversation with the owner of White House Farm on the south fork of the Shenandoah River for educational and research purposes. We have very strong ties with the U.S. Geological Survey in Reston, VA and think they may be interested in supporting efforts in education. We are in conversation with George Mason University about the Smithsonian Conservation Center and making it available to students at James Madison. Also, the Smithsonian Conservation Biology Institute is the location of the Mid-Atlantic core site in the National Ecological Observatory Network (NEON), which will be highly instrumented and generate data at 20 sites across the country using fixed and mobile sensors.

Beyond working with the school divisions, we also see the Bluff Point Project as furthering our recognition from the Carnegie Foundation as one of 311 higher education institutions with the Carnegie Community Engagement Classification. We see this as an excellent opportunity to engage the community in this work related to the health of the Bay. The Department of Geology and Environmental Science has strong ties to the Department of Geology at William and Mary. We look forward to building further relationships across several departments. In addition to what we see as an outstanding opportunity to impact K-12 education, we are happy to explore collaborative research at Bluff Point and at our research sites along the Valley. Through collaboration we should be able to leverage our work to mutual benefit.

I have been in contact with Dean Carl Strikwerda at William and Mary. He is keenly interested in the partnership and moving the project forward.

We at James Madison thank you for the opportunity to participate in the project and look forward to working with you.

Sincerely,

David F. Brakke, Dean