**Amber Jones**
**816 E Street, SE**
**Washington, DC 20003**
June 29, 2003

Ms. Carol Mitten
Office of Zoning
441 4th Street, NW, Suite 210
Washington, DC 20001

RE: Case 02-30

Dear Ms. Mitten and fellow commissioners:

At the June 19 public hearing on the zoning request of Georgetown University and the National Park Service, one of the commissioners (Mr. May, I believe) asked whether there was a basis (other than opinion) for the testimony of Pope Barrow and Amber Jones that vegetation and wetlands can reduce the flow of flood waters and reduce sedimentation in boating channels downstream. I am providing four references on this subject.

Background: The 1995 environmental assessment on the proposed land exchange found the parcel of land proposed for the boathouse, Tract 102-114, had "reverted to a basically natural, if not pristine condition, and is characterized by tree-lined riverbanks." It also found "conditions that quality this tract as a wetland."

**References re: role of vegetation and wetlands in flood control**

Executive Director, Interagency Floodplain Management Review Committee, Executive Office of the President, in a 1995 paper on the 1993 Mississippi River Floods: "The loss of wetlands and upland cover and the modification of the landscape throughout the basin over the last century and half significantly increased runoff....Upland watershed treatment and restoration of upland and bottomland wetlands can reduce flood stages in more frequent floods (25 years and less)..."[1]

White House Office of Environmental Policy, in a new 1993 policy to protect wetlands: "The Nation's wetlands perform many functions that are important to society, such as improving water quality, recharging groundwater, providing natural flood control, and supporting a wide variety of fish, wildlife and plants. The economic importance of wetlands to commercial fisheries and recreation uses is also enormous."[2]

Chesapeake Bay Commission, in a 1994 resolution on protecting riparian (riverbank) forests: "It will be the policy of the Commission to work to maintain riparian forests where they exist and restore them where they have been lost....Riparian forests can protect water quality in streams by mitigating nutrients in both surface and groundwater, by settling out sediments in runoff, and by

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decreasing stream velocity and energy during storm events that might otherwise increase streambank erosion. These forests are also critical to ensuring a host of living resource habitat benefits for organisms in streams."[3]

National Park Service and Department of Interior, in the environmental assessment for the proposed land exchange now being addressed in Case 02-30: "The clearing or modification and development of such an established woodland site increases the potential for storm water runoff and soil sedimentation into the Potomac River and ultimately the Chesapeake Bay. Construction activities or even increased recreation on this tract will impact the natural resources and degrade existing natural resources."[4, 5]

I believe, based on these and other references, that there is at least a possibility that elimination of the trees, vegetation, and wetlands on Tract 102-114 for construction and development could lead to increased runoff, increased soil sedimentation of the Potomac River and Chesapeake Bay, and increased stream velocity during floods. I also believe that the trees, vegetation, and wetlands may be more established and therefore of greater value for these purposes in 2003 than they were when the environmental assessment was prepared in 1995.

I hope this information is helpful in your deliberations.

Sincerely,

Amber Jones

Amber Jones

[1] "New Directions in Floodplain Management," Water Resources Bulletin, June 1995, by Gerald E. Galloway, Jr., Executive Director, Interagency Floodplain Management Review Committee, Executive Office of the President, page 353.

[2] "Protecting America's Wetlands: A Fair, Flexible, and Effective Approach," August 24, 1993, by White House Office on Environmental Policy, page 2.

[3] "An Analysis of Riparian Forest Buffer Policies in Maryland, Virginia, and Pennsylvania, Adopted January 6, 1995," by Chesapeake Bay Commission, pages 1-2.

[4] "Environmental Assessment for the Proposed Exchange of Properties between the National Park Service and Georgetown University within the District of Columbia and within the Boundary of Potomac Palisades Park within the Chesapeake and Ohio Canal National Historical Park," July 1995, by National Capital Area, National Park Service and the U.S. Department of the Interior, page 7.

[5] This statement refers to Tract 102-109, Georgetown University's parcel. The document omits any similar analysis of the potential impacts of clearing, modifying, or developing Tract 102-114, even though that tract is also acknowledged to be a woodland site.