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EXECUTIVE SUMMARY

Georgetown University proposes to construct a boathouse along the Potomac River, in the Georgetown portion of Washington, D.C. The proposed project site (Tract 102-114) is located within the Chesapeake and Ohio Canal National Historical Park (C&O Canal NHP) that is managed by the National Park Service (NPS). The proposed site would be made available to the University by NPS in exchange for property that the University owns approximately one mile upstream (Tract 102-109). NPS is interested in protecting the upstream property, as well as access to it along the Capital Crescent Trail, due to the sensitive cultural and environmental resources present at the site.

This Environmental Assessment (EA) is being prepared by NPS in compliance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations implementing NEPA [40 Code of Federal Regulations (CFR) 1500 – 1508], and the environmental policies and procedures of the NPS including NPS Environmental Compliance Field Guide- Director's Order 12 (DO-12). The EA characterizes the potential direct, indirect, and cumulative environmental impacts of the proposed boathouse alternatives and the No Action Alternative and identifies mitigation measures to avoid, offset, or minimize the impacts that would be generated. The EA also provides information to be used in fulfilling Section 106 of the National Historic Preservation Act (NHPA).

Purpose and Need

The purpose of the proposed action is to construct a modern boathouse facility that would provide training and boat storage space for Georgetown University's rowing program and enable the program to successfully compete in National Collegiate Athletic Association (NCAA) rowing events. Georgetown University's crew teams currently row out of Thompson Boat Center (TBC), where the University rents boat storage space and space for exercise machines. Georgetown also stores crew shells in two outside fenced compounds at TBC as well as at other off-site locations. In addition to Georgetown University, a number of colleges and high schools row out of TBC.

The proposed action would allow Georgetown University's rowing program to move its boats and training equipment out of TBC, which currently is overcrowded and includes several outdoor storage compounds. The proposed boathouse would also provide new and modernized training facilities for Georgetown University men and women participating in the University's crew program in a single facility.

The boathouse facility is being proposed to accommodate the immediate and long-term needs of the men's and women's teams. The building program consists of a minimum of five bays for boat storage (to store 40 eight-oared shells for the eight teams); an exercise area with ergometers, a rowing tank, and locker rooms adjacent to the boat storage area; and support space including crew coaches' offices, a boat repair shop, bathrooms, a kitchenette, an observation deck, and ancillary storage spaces.

Alternatives Considered

According to DO-12, the NPS policy and guidelines for NEPA analysis, EAs must examine a range of reasonable alternatives that meet objectives laid out in the purpose and need, and that reduce or eliminate impacts on important environmental resources. The range of alternatives includes those reasonable alternatives that are evaluated throughout the document, as well as alternatives that were initially considered but were eliminated from further study. This EA analyzes in depth the following four alternatives:

- Alternative A (Zoning Alternative), which would result in a boathouse for Georgetown University with a footprint of 18,682 square feet and a maximum height of 51' measured from grade to the ridge of the roof, as approved by the D.C. Zoning Commission. This alternative would meet the program requirements for the boathouse.
- Alternative B (MOA Alternative), which is a reduced boathouse size alternative that would provide a boathouse for the University with a maximum footprint of 15,000 square feet and a maximum height of 40' measured from grade to the ridge of the roof, consistent with the requirements identified in a 1997 National Historic Preservation Act Section 106 Memorandum of Agreement (MOA) between the NPS, D.C. State Historic Preservation Officer, and Advisory Council on Historic Preservation. This alternative would not meet the program requirements for the boathouse.
- Alternative C (Reduced Height Alternative), which is a reduced building height alternative resulting in a boathouse for the University with a footprint of 18,682 square feet and a maximum height of 36' – 6" measured from grade to the ridge of the roof. This alternative would meet the program requirements for the boathouse. **For the purposes of this EA, this is the Preferred Alternative.**
- No Action Alternative, under which a boathouse would not be constructed at this location, and the University would continue to row out of TBC. The possibility of the University to develop a boathouse on the upstream parcel would remain, or the University could sell its parcel and access easement for development by others.

Summary of Impacts

This EA examines the potential impacts of the proposed boathouse under each alternative on the following broad resource disciplines: Socio-Economic Resources, Cultural Resources, Transportation Resources, Physical and Biological Resources, and Utilities/Infrastructure. These resource areas were determined to warrant detailed study in this EA through the scoping process, together with Federal laws, regulations, Executive Orders, and NPS Management Policies (2001). The potential impacts of the alternatives on these resources are summarized below.

Socio-Economic Conditions	
Land Use/ Ownership	<p>Alternatives A (Zoning Alternative), B (MOA Alternative) and C (Preferred Alternative)</p> <ul style="list-style-type: none"> ▪ Would change the use of the site from public open space to a private collegiate rowing use. Although a boathouse represents a more intensive recreational use of the site, this recreational use is consistent with current surrounding recreational uses and with historical recreational uses along this section of the river during the 19th and 20th centuries. ▪ Would result in a one-for-one land exchange resulting in no net loss of public recreational land. Also, the land exchange would result in extinguishing the one mile-long, 15-foot wide right-of-way that the University currently owns over the Capital Crescent Trail (CCT). ▪ Land use impacts would occur to the Washington Canoe Club (WCC), a private club which is permitted on NPS property, since WCC uses overlap with the boathouse parcel being considered for land exchange. NPS would be required to negotiate with WCC to minimize disruption and impacts to these existing uses. <p>No Action Alternative</p> <ul style="list-style-type: none"> ▪ There would be no impact on land use or property ownership since the project site would continue to be used as passive open space. The Preliminary Land Exchange Agreement would be invalidated and the University would continue to retain control and development rights of the upstream parcel and use of the right-of-way along the CCT.
Visitor Experience	<p>Alternatives A (Zoning Alternative), B (MOA Alternative) and C (Preferred Alternative)</p> <ul style="list-style-type: none"> ▪ Generally, along the C&O Canal, the experience of running, hiking, biking, or boating would remain predominantly unchanged for hikers, runners or bicyclists. For visitors involved in cultural interpretation, there would be a change in the visual setting of the canal in the vicinity of the project area. This change would be slightly greater under Alternative A relative to Alternative B or C. This change would be localized adjacent to the project site, and visitors would continue to have opportunities similar to existing conditions in the area upstream from the site. ▪ Visitors passing the project site along the CCT would experience a two-story building, where they currently experience a natural environment. While a similar condition exists at the adjacent WCC, a boathouse under each alternative would result in a moderate impact on visitor experience. ▪ Mitigation – Maintain public access to the river and waterfront at the boathouse site; minimize interference with trail use during and after construction; and design the facility to maximize windows and other fenestrations to reduce the effect of creating a solid wall adjacent to the CCT.

	<p>No Action Alternative</p> <ul style="list-style-type: none"> ▪ There would be no change to visitor experience at the project site under the No Action Alternative. However, potential development and access to the upstream site along the University’s right-of-way could result in impacts to trail users.
<p>Planning Controls /Policies</p>	<p>Alternatives A (Zoning Alternative), B (MOA Alternative) and C (Preferred Alternative)</p> <ul style="list-style-type: none"> ▪ Would be generally consistent with the following: <ul style="list-style-type: none"> — Non-Motorized Boating in the Potomac and Anacostia Rivers, Washington, D.C. — Georgetown Waterfront Park Plan — EA for the Proposed Exchange of Properties between NPS and Georgetown University — Comprehensive Plan for the National Capital — Washington, D.C. Zoning ▪ Mitigation - Would require consultation for final approval with the National Capital Planning Commission and Commission of Fine Arts for situating the boathouse “between 1,155 feet to 1,250 feet west of Key Bridge;” would require a new NHPA Section 106 MOA if either Alternative A or C is pursued. <p>No Action Alternative</p> <ul style="list-style-type: none"> ▪ Since the boathouse would not be constructed, there would be no progress towards supporting the goals of the Comprehensive Plan, the Georgetown Waterfront Park Plan, or the Non-Motorized Boating study. Also, the land exchange would not proceed and the upstream tract would remain subject to the CM-1 zoning (Commercial and Light Manufacturing) and available for future use by Georgetown University. If the upstram site is developed, it would be contrary to the NPS’s goals of precluding this environmentally sensitive site from development and acquiring the University’s right-of-way along the CCT.
<p>Community Facilities</p>	<p>Alternatives A (Zoning Alternative), B (MOA Alternative) and C (Preferred Alternative)</p> <ul style="list-style-type: none"> ▪ Would allow Georgetown to vacate the TBC, and open up space for other users. The CCT would be widened to allow access for construction, service and emergency vehicles, and trailers. ▪ Mitigation - The University will take all precautions during construction and operation of the boathouse to ensure that CCT use is not interrupted. <p>No Action Alternative</p> <ul style="list-style-type: none"> ▪ No additional boathouses would be constructed and the need for additional boating facilities would remain at current levels.

<p>Cultural Resources</p>	
<p>Historic Preservation</p>	<p>Alternatives A (Zoning Alternative), B (MOA Alternative) and C (Preferred Alternative)</p> <ul style="list-style-type: none"> ▪ Would not negatively affect the historic setting of the C&O Canal since a boathouse would be consistent with the existing urban views of Georgetown already present in this area. Historically, the C&O Canal was an area of waterfront-related activity and Georgetown was one of the many “canal towns” located along the canal in contrast to otherwise natural surroundings. Also, there would be minimal impacts on the CCT (related to historic resources), located along the historic alignment of the B&O Railroad, since development has historically existed near the former tracks.

	<ul style="list-style-type: none"> ▪ Would result in a moderate impact on the WCC. The integrity of location and setting of the WCC would remain intact, for the addition of a boathouse along the Potomac River would reinforce the historic character where the WCC was one of several boathouses located along the waterfront. Additionally, the ability of the WCC to convey its association with boating along the Potomac River would remain intact. ▪ There would be no impacts on the following historic districts or resources: Old Georgetown Historic District; the Potomac Gorge; Alexandria Aqueduct Bridge Abutment and Pier; Potomac Boat Club; Key Bridge; Old North (located on Georgetown University campus); Healy Hall; or, the Georgetown University Astronomical Observatory. ▪ Mitigation – A new MOA would be required to comply with NHPA Section 106 if Alternatives A or C are pursued. <p>No Action Alternative</p> <ul style="list-style-type: none"> ▪ There would be no effect on historic resources under the No Action Alternative. However, potential development at the upstream site could impact cultural resources within the C&O Canal NHP, including to the remnants of the incline plane at this location.
<p>Visual Resources</p>	<p>Alternatives A (Zoning Alternative), B (MOA Alternative) and C (Preferred Alternative)</p> <ul style="list-style-type: none"> ▪ Impacts from key viewpoints were analyzed and are illustrated in the computer simulations at the end of this summary. Overall, the visual impacts of all three alternatives are considered moderate. Differences among the alternatives at the specific viewpoints chosen for this analysis are described below: <ul style="list-style-type: none"> – From two key viewpoints, the George Washington Memorial Parkway (GWMP) and Key Bridge, a boathouse under all three alternatives would result in a minor visual impact since it would be visible among buildings somewhat similar in mass and scale, would not interfere with the view, and would not change the character of the existing viewshed. – From the CCT and the C&O Canal Towpath, the degree of impact would vary depending on the location of the viewer. However, from the viewpoints where the simulations were generated, the impact under each alternative would be major because the boathouse would be a dominant visual element, would interfere with views, and would substantially change the character of these views. As one moves away from the building, these impacts would lessen. – For viewers standing immediately adjacent to the building at the C&O Canal Towpath, Alternative A would result in the greatest impact and Alternative C would result in the least impact to views towards the river and the Virginia shoreline. ▪ Mitigation – Use architectural materials and colors to minimize contrast against the natural environment, and retain/plant vegetation to reduce the period of visibility of the boathouse. Implement any conditions or changes that may result from NCPC and CFA review of the proposed boathouse under either alternative. <p>No Action Alternative</p> <ul style="list-style-type: none"> ▪ There would be no change and no impacts to the visual environment at the site under the No Action Alternative. Minor adverse visual impacts would occur around the TBC since outdoor boat storage would remain in this area. Also, potential development at the upstream parcel could adversely affect the view of the Potomac Gorge from the GWMP and impact existing views along the CCT and the towpath.

Transportation Systems	
Traffic /Parking / Transit / Pedestrian and Bicycle Facilities	<p>Alternatives A (Zoning Alternative), B (MOA Alternative) and C (Preferred Alternative)</p> <ul style="list-style-type: none"> ▪ Construction activities would require shifting the CCT, widening the paved area to provide access, and relocating the northern fence adjacent to the WCC. This would result in a slight to moderate impact on trail users. ▪ Operations of the boathouse would result in service/emergency vehicles, or trailers occasionally accessing the site. Other than temporary parking of these vehicles, there would be no parking on-site. Users of the facility would either walk or be shuttled to the area during training or regattas. Minimal impacts are anticipated on CCT users when vehicles access the site. ▪ No impacts are anticipated on the public transit system within the vicinity of the project area. If needed, the University could expand its shuttle service to serve the site during regattas. ▪ Mitigation – Employ measures to minimize impacts to CCT trail users. These include using a fence to separate the CCT from the construction access lane, providing flagmen when construction vehicles are accessing the site or unloading equipment, and if necessary, constructing during the night to ensure that the trail remains open for users during the daytime. <p>No Action Alternative</p> <ul style="list-style-type: none"> ▪ There would be no changes on vehicular traffic, parking, transit, pedestrian or bicycle systems under the No Action Alternative. However, if the upstream site is developed, there could be impacts to CCT trail users along the one mile length of the right-of-way from vehicles accessing the upstream site.
River Navigation/ Use	<p>Alternatives A (Zoning Alternative), B (MOA Alternative) and C (Preferred Alternative)</p> <ul style="list-style-type: none"> ▪ Moving the University’s crew out of TBC would reduce congestion along that segment of the river, especially during regattas, due to a new entrance and exit point. The placement of the new docks, however, would interfere with the WCC practice and race courses. ▪ Mitigation – The Potomac River Safety Committee’s river guidelines should be revised and updated through a cooperative process. New river patterns should be included to guide the Georgetown crew similar to guidelines used to coordinate river egress and ingress between WCC and the Potomac Boat Club. <p>No Action Alternative</p> <ul style="list-style-type: none"> ▪ There would be no changes on river navigation under the No Action Alternative.

Physical/Biological Resources	
Water Resources/ Geology, Soils & Topography	<p>Alternatives A (Zoning Alternative), B (MOA Alternative) and C (Preferred Alternative)</p> <ul style="list-style-type: none"> ▪ A hydraulic impact analysis to assess the impacts of a boathouse concluded that water surface elevations, velocities, and shear stresses of the river in flood conditions would not change at WCC and would change very slightly at the C&O Canal embankment. ▪ The U.S. Army Corps of Engineers has determined that wetlands on the site are artificial and no wetlands impacts would occur from construction of the boathouse.

	<ul style="list-style-type: none"> ▪ Minor impacts would result on other water resources including: <ul style="list-style-type: none"> — On water quality due to removal of the vegetative cover during construction; — Increase in stormwater run-off due to an increase in impervious surfaces (42% under Alternative A and C and 34% under Alternative B); — On groundwater due to potential disturbance to existing fill during construction. ▪ Mitigation – The boathouse facility would be flood-proofed and the University would pursue mitigation measures to minimize damage to equipment within the facility. During construction, appropriate Best Management Practices (BMPs), including the preparation of a soil erosion and sediment control plan and a stormwater management plan would be pursued. <p>No Action Alternative</p> <ul style="list-style-type: none"> ▪ There would be no changes to water resources or the site’s geological, soil or topographic resources under the No Action Alternative. However, potential development of the upstream parcel could impact existing wetlands at that site.
<p>Terrestrial/ Aquatic Vegetation & Wildlife</p>	<p>Alternatives A (Zoning Alternative), B (MOA Alternative) and C (Preferred Alternative)</p> <ul style="list-style-type: none"> ▪ Minor impacts would result on the vegetative and wildlife resources including: <ul style="list-style-type: none"> — Removal of most on-site vegetation; — Construction of the dock that would remove some available space for potential growth of submerged aquatic vegetation (SAV), as well as remove potential habitat area for benthic invertebrates; — Removal of habitat area for birds and mammals. ▪ Mitigation – Create shallows in the vicinity between the dock and shoreline to improve chances for SAVs and the organisms that are attracted to them. Plant new native trees and shrubs to offset tree loss, and provide replacement fees as required for the loss of the two special trees under the District’s Urban Forest Preservation Act. <p>No Action Alternative</p> <ul style="list-style-type: none"> ▪ There would be no impacts on terrestrial, aquatic vegetation, and wildlife resources at the project site under the No Action Alternative. Potential development of the upstream parcel could result in the removal of vegetation and impacts to terrestrial plant and animal species at that location.
<p>Noise Levels</p>	<p>Alternatives A (Zoning Alternative), B (MOA Alternative) and C (Preferred Alternative)</p> <ul style="list-style-type: none"> ▪ Minor impacts would occur due to construction activities and potential visitor activity during regatta events. However, these noise levels are not expected to exceed ambient noise levels typical of the urban area surrounding the site. ▪ Mitigation – During construction, appropriate BMPs would be implemented to meet the District noise standards. <p>No Action Alternative</p> <ul style="list-style-type: none"> ▪ There would be no noise-related impacts under the No Action Alternative.

Infrastructure	
Stormwater/ Sanitary Sewer/ Potable Water/ Natural Gas/ Solid Waste Disposal Systems	<p>Alternatives A (Zoning Alternative), B (MOA Alternative) and C (Preferred Alternative)</p> <ul style="list-style-type: none">▪ Since existing utility systems to serve the boathouse are available and have sufficient capacity for boathouse uses, there would be minimal impacts on the utility systems under either alternative. Construction methods to avoid impacts to the Dulles Interceptor sewer line under the site have been coordinated with DC WASA. <p>No Action Alternative</p> <ul style="list-style-type: none">▪ There would be no impacts on the utility systems under the No Action Alternative.

Photo Simulations (View from George Washington Memorial Parkway)



Alternative A (Zoning Alternative)



Alternative B (MOA Alternative)



Alternative C (Preferred Alternative)

Photo Simulations (View from Key Bridge)



Alternative A (Zoning Alternative)



Alternative B (MOA Alternative)



Alternative C (Preferred Alternative)

Photo Simulations (View from Capital Crescent Trail)



Alternative A (Zoning Alternative)



Alternative B (MOA Alternative)



Alternative C (Preferred Alternative)

Photo Simulations (View from C&O Canal Towpath to Peak of the Boathouse)



Alternative A (Zoning Alternative)



Alternative B (MOA Alternative)



Alternative C (Preferred Alternative)

Photo Simulations (View from C&O Canal Towpath to Hyphen of the Boathouse)



Alternative A (Zoning Alternative)



Alternative B (MOA Alternative)



Alternative C (Preferred Alternative)

Photo Simulations (View from C&O Canal Towpath to Wings of the Boathouse)



Alternative A (Zoning Alternative)



Alternative B (MOA Alternative)



Alternative C (Preferred Alternative)