

APPENDIX L: DRAFT SUPPLEMENTAL REPORT
Non-Motorized Boating on the Potomac River in Georgetown (2000)

Georgetown University Boathouse
Environmental Assessment

April 2006

Draft Supplemental Report

Non-Motorized Boating on the Potomac River in Georgetown



Prepared as a Supplement to a
1989 Special Study on Non-Motorized Boating
on the Potomac and Anacostia Rivers



The National Park Service

National Capital Region
Office of Lands, Resources, & Planning



March 2000

Executive Summary

This document is a supplement to a 1989 National Park Service (NPS) study on nonmotorized rowing in the Washington, D.C. region. Many circumstances have changed since the completion of the 1989 study. However, one thing has remained constant. The continued and increasing demand for rowing facilities on the Potomac River in Georgetown. Thompson's Boat Center, the NPS's primary rowing facility on the Potomac River, is operating over capacity with a long waiting list of rowers looking for a space for their shells. Ten high schools in the region have added rowing programs since 1989 and long established programs continue to grow. Institutional (high school and university) *and club/community* rowing programs occupy all available space in every boathouse in the region.

Currently both Georgetown University and George Washington University (GW) have hopes to construct their own boathouses in Georgetown. Georgetown University has entered into a land exchange agreement with the NPS and is evaluating a potential site just upstream of the Washington Canoe Club. GW is working with the NPS to locate a site to meet its needs. The NPS is also working with the citizens of Arlington County to study the feasibility of constructing a boathouse on the Virginia shore of the Potomac.

Of the four sites evaluated in the 1989 study, only two continue as valid sites for institutional (high school and university) rowing facilities. Site 'A', west or upstream of the Washington Canoe Club, remains a viable site and is currently being evaluated by Georgetown University for its new boathouse. Site 'C', directly upstream of Key Bridge, also remains a viable option. Development of site 'C' would continue to be contingent upon the purchase and demolition of three existing townhomes on the site and the accommodation of Jack's canoe rental operation.

Site 'B' is a shallow site directly east, or downstream of the Canoe Club. Its proximity to the historic Alexandria Aqueduct abutment limits the area which could be developed without adversely impacting this historic resource. The presence of the Potomac Interceptor Sewer line, its outfall and vault further constrain the site's buildable area. Therefore, site 'B', while not feasible for an institutional boathouse, could potentially accommodate a small boathouse, primarily for single person shells.

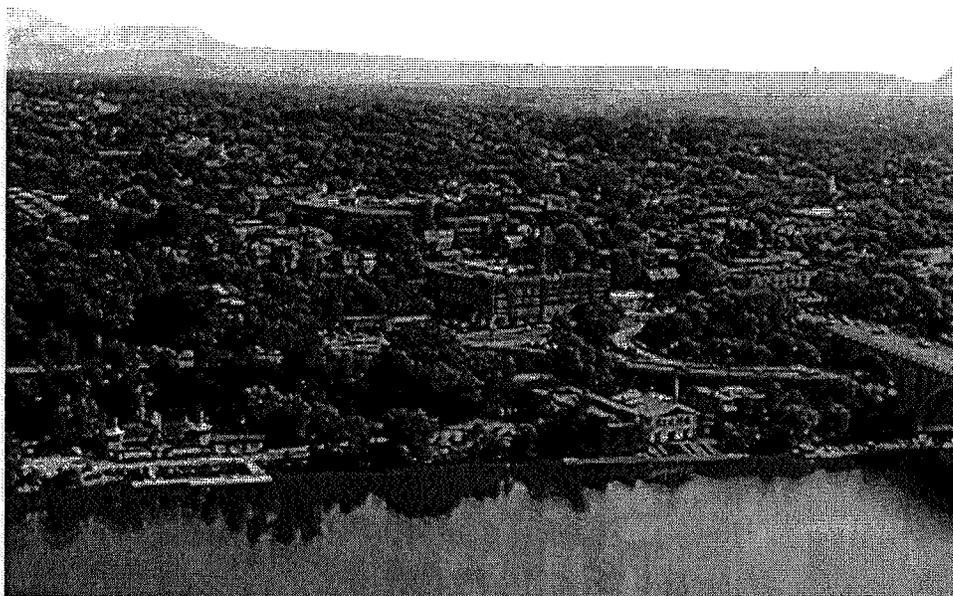
Site 'D' is a former ice house and is currently occupied primarily by the General Services Administration. Its distance from the river, concerns over safety as rowers would have to cross K Street with shells, the high cost of developing the site for a boathouse, and the current approved plan to return the property to open space have eliminated this site from further consideration as a viable alternative.

The NPS concludes that three new boathouses are the maximum number of additional boathouses which should be constructed within the boathouse zone on the Georgetown Waterfront in the District of Columbia. Additional demand for rowing should be accommodated at facilities on the Potomac in Virginia and on the Anacostia River. Such facilities would be the subject of separate studies to be completed at a later date.



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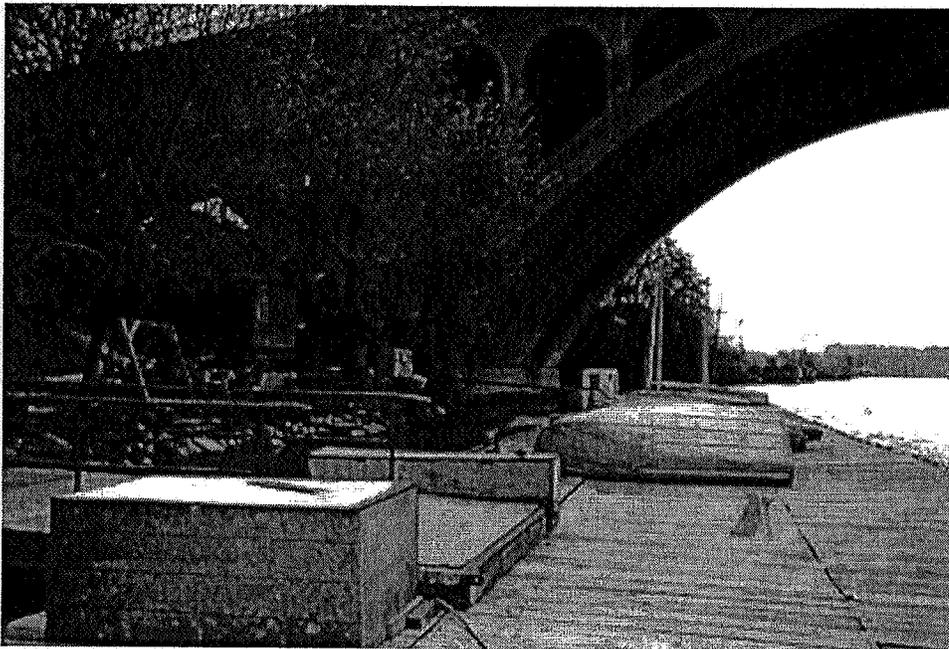
View of Georgetown with the Washington Canoe Club and Potomac Boat Club

Preface

In 1989 the National Park Service (NPS) completed a study of non-motorized boating on the Potomac and Anacostia Rivers in Washington, D.C. As predicted in that study, rowing has continued to grow on these rivers over the past decade. Using that study as a base, the NPS has evaluated the current demand for rowing facilities on the Potomac River and the capacity of existing and newly proposed facilities to determine what additional need still exists for facilities on the Potomac River in Georgetown. This supplemental study concludes with recommendations on viable sites in Georgetown and how potentially to meet the existing *and future* demand for rowing facilities.

The greatest shell storage demand is for eight-person shells, which are primarily used by institutional rowing programs, as they require the largest amount of actual storage space and accompanying facilities (equipment storage, locker rooms, training/meeting rooms). This study, therefore, primarily evaluates the feasibility of each of these sites for a boathouse which could effectively house an institutional program. The NPS recognizes the growing demand for storage of sculling (single and double) shells and has included this in its evaluation of the potential sites. This study further evaluates the feasibility of these four sites under current circumstances and recommends which sites remain viable and proposes how to proceed from here.

The NPS would like to thank the members of the Georgetown Waterfront Commission and its Boathouse Committee for their support and assistance. Their expertise, analysis, and recommendations were invaluable to the completion of this report.



Jack's Canoe Rental Docks at Key Bridge

Current Facilities and Demand

There continue to be five facilities which provide nonmotorized access to the Potomac River in the Georgetown area. These are Thompson's Boat Center, the Potomac Boat Club, Jack's Canoes, the Washington Canoe Club, and Fletcher's Boathouse. Of these, only Thompson's and Potomac Boat Club provide facilities for institutional rowing programs (university and high school 8-person shells). Both of these facilities continue to operate at capacity and with long waiting lists. The time spent on these waiting lists can be several years. The actual demand is believed to exceed even the waiting lists, as many people choose not to add their names to the already lengthy lists. *New programs cannot start and current programs are being capped because of the lack of available storage space for new shells.*

Current Facility Capacities

	Singles	Doubles	Fours	Eights
Thompson's Boat Center	170	13	18	86
Potomac Boat Club	90	16	12	8

There are currently five universities, 14 high schools, and several adult rowing programs and clubs which row out of Thompson's and PBC. The specific numbers are as follows:

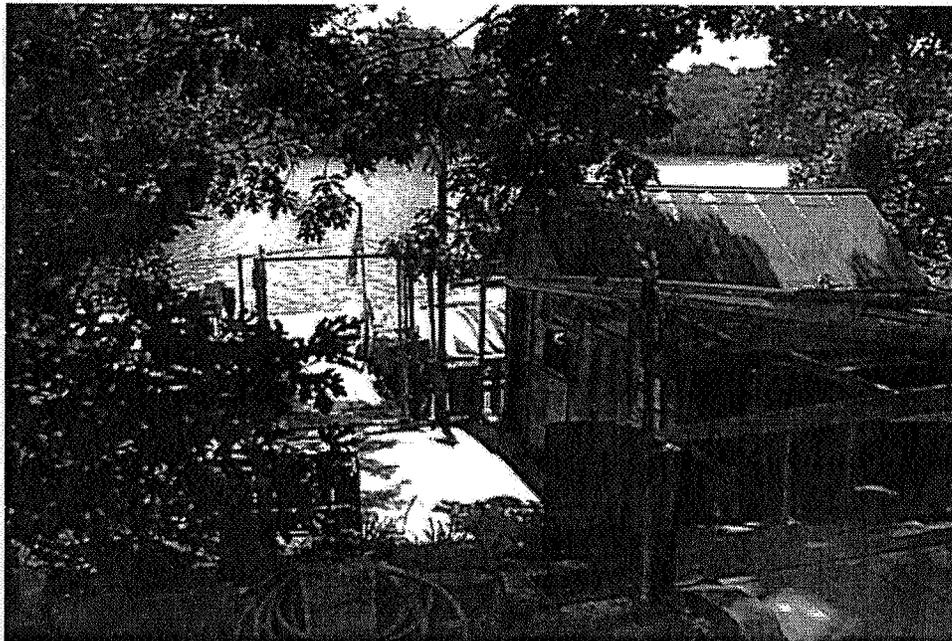
Breakdown of Facility Occupancy

	Singles	Doubles	Fours	Eights
<u>Thompson's Boat Center</u>				
American University	-	2	2	2
Catholic University	-	-	2	2
Georgetown University	5	6	5	15
George Washington University	-	2	2	10
Trinity University	-	-	1	-
Bishop O'Connell	-	-	1	4
Bethesda Chevy Chase (MD)	-	-	5	1
Georgetown Day School (DC)	-	-	2	2
Georgetown Visitation (DC)	-	-	-	2
Gonzaga (DC)	-	-	1	4
Holton Arms(MD)	-	-	1	3
McLean (VA)	-	-	-	7
Potomac	-	-	1	1
St. Albans/National Cathedral (DC)	-	-	1	6
Sidwell Friends (DC)	-	-	-	2
Walt Whitman (VA)	-	1	4	5
Woodrow Wilson (DC)	-	-	2	4
Yorktown (VA)	-	-	4	7
DC Strokes (club)	-	-	2	2
<u>Potomac Boat Club</u>				
Washington-Lee (VA)	-	-	3	8

The following is a listing of the numbers of members on previous and current rosters of rowing organizations in the metropolitan area. These numbers demonstrate the current and growing popularity of rowing in the area and the increasing demand for rowing facilities.

Institutional Program Rosters

<u>High Schools</u>	<u>1985</u>	<u>1988</u>	<u>1999</u>
Bethesda Chevy Chase (MD)	---	---	51
Georgetown Day School (DC)	---	---	25
Georgetown Visitation (DC)	---	---	49
Gonzaga (DC)	---	---	45
Holton Arms(MD)	---	---	35
McLean (VA)	---	---	40
National Cathedral (DC)	---	---	27
Bishop O'Connell	---	---	50
Potomac School	---	---	25
St. Albans (DC)	---	---	27
Sidwell Friends (DC)	---	---	20
Washington-Lee (VA)	100	120	100
Walt Whitman (VA)	---	45	90
Woodrow Wilson (DC)	---	75	70
Yorktown (VA)	80	90	122
Totals	180	330	751



Jack's Canoe Rental

Institutional Rosters Continued

Universities	1985	1988	1999
American	---	---	25
Catholic	---	---	50
Georgetown	130	130	140
George Washington	80	80	120
Trinity	24	24	25
Totals	234	234	360

Grand Total for Institutional Rowing in Georgetown 1111 Rowers

Public & Private Rowing Programs/Clubs Rosters

Thompson's Boat Center	175
Potomac Boat Club	275
Washington Canoe Club	185
Totals	635

Sources: Georgetown Local Organizing Committee, National Capital Area Scholastic Rowing Association, Georgetown Waterfront Commission- Boathouse Committee, Guest Services Inc.- Thompson's Boat Center

The number of university and high school rowers on the Potomac River has more than doubled since the completion of the 1989 study. Ten high schools have started rowing programs in that time. However, there has been no increase in permanent space available for storage of shells and equipment. Thompson's Boat Center currently stores many of these new institutional shells within a temporary outdoor storage compound adjacent to the boathouse. However, the property where this is located is slated for other development. Therefore, the capacity of this temporary compound will be lost in the near future. This will further contribute to the demand for institutional storage space in Georgetown.



Thompson's Boat Center with Temporary Compound at left
Draft Supplemental Nonmotorized Boating Study – Potomac River in Georgetown

Assumptions

The 1989 Study made four assumptions about the Georgetown waterfront upon which its recommendations were based. These assumptions have been reevaluated and updated.

Assumption 1:

There are no sites for boathouses along the Virginia Shore of the Potomac.

Update to Assumption 1

The National Park Service is currently evaluating several sites on the Virginia shore of the Potomac as potential sites for one institutional rowing facility. However, should a facility be developed in Virginia, the current demand for rowing on the Potomac would still require new facilities in Georgetown.

Assumption 2:

The floating restaurant will eventually be built.

Update to Assumption 2:

This assumption remains valid today. Issuance of a public notice from the Army Corps of Engineers of plans to construct the restaurant seems eminent. With favorable public comment the permit will most likely be issued. If the restaurant is not built, this site remains a potential boathouse site.

Assumption 3:

Both the Potomac Boat Club and the Washington Canoe Club will remain viable at their present locations.

Update to Assumption 3:

This assumption remains valid.

Assumption 4:

The K Street corridor will be developed according to the waterfront plan, thereby adding 100+ parking spaces adjoining the existing and proposed boathouses along the waterfront. The Whitehurst Freeway rehabilitation project will require a 30 foot construction access zone on either side of the structure.

Update to Assumption 4:

The K Street corridor continues to be proposed for development as a parking lot. The Whitehurst Freeway rehabilitation project has been completed.

New Assumptions

Assumption A:

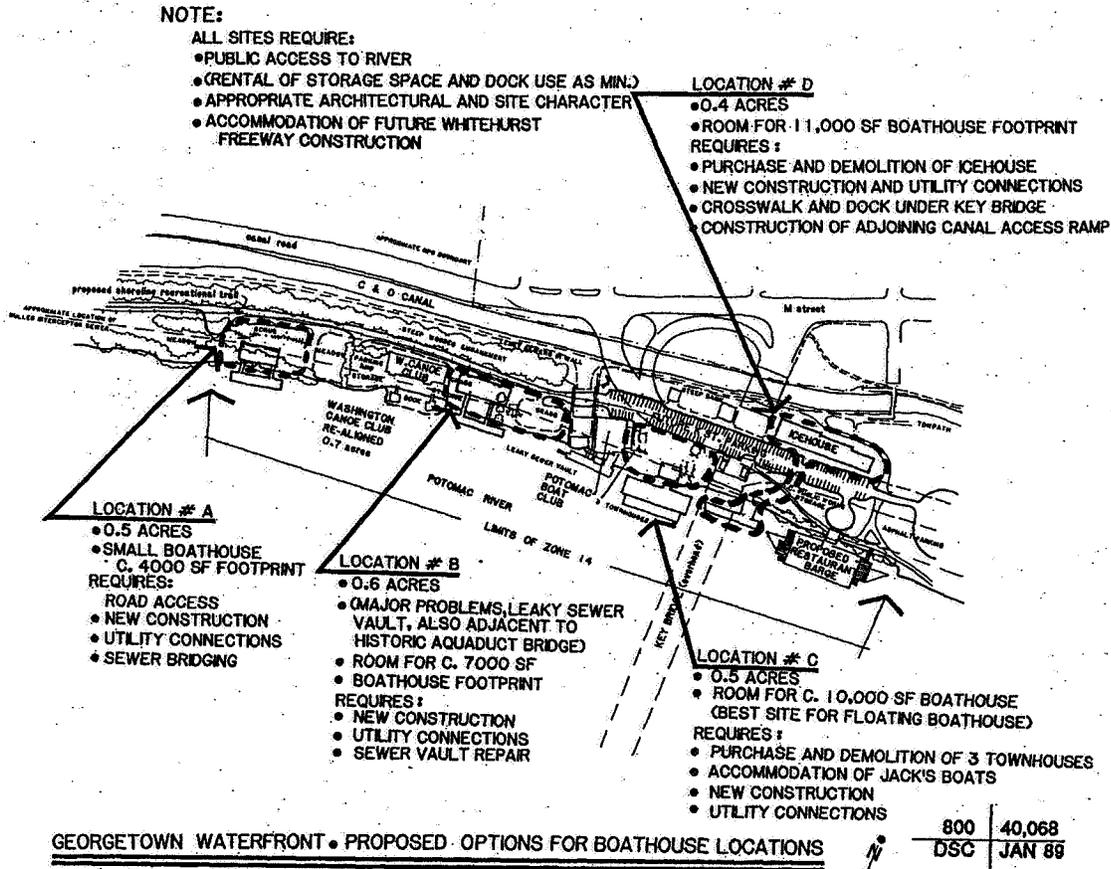
A buffer zone of 50 feet to the west of the Alexandria Aqueduct abutment must be incorporated into the design for potential facilities at site 'B'.

Assumption B:

A maintenance and access buffer zone of 25 feet from Key Bridge and 10 feet from the Whitehurst Freeway, must be incorporated into the design for potential facilities at sites 'C' and 'D'.

The Sites – Excerpted from 1989 NPS Study

There were four potential sites for nonmotorized boating facilities identified in the 1989 study. The following is an excerpt from that study outlining those sites.



Site A: This site lies just west of the Washington Canoe Club at the west end of the Georgetown waterfront plan's zone 14, and encompasses almost one-half acre. It could comfortably accommodate an average-sized (6,000 to 8,000 square-foot) building. For the public to get to the site, a new road providing emergency access and a drop-off point must be part of the package, as well as new utility connections and avoidance of construction over the Dulles Interceptor Sewer.

Site B: Located on part of lands used by the Washington Canoe Club, extending from the club east to the remains of the Aqueduct Bridge, this site sits astride a major outlet chamber from the Dulles Interceptor Sewer. It is slightly larger than one-half acre and could accommodate up to a 7,000-square-foot building. New utility connections and major repair of the sewer vault would be required.

Site C: This site is between the Potomac Boat Club and Key Bridge, where Jack's Canoes and three privately owned townhouses are now located. It comprises almost one-half acre and is the most suitable site for a floating boathouse (up to a 10,000-square-foot building). The estimated cost of the purchase and demolition of the townhouses is at least \$1.5 million. New utilities would be needed, and the new structure must be able to accommodate Jack's Canoes, if this business is continued.

Site D: This location is not along the shoreline but lies north of K Street. There is space for an 11,000-square-foot building on the site currently occupied by the Ice House building. The estimated acquisition and demolition cost is at least \$3 million, and would require a pedestrian crossing to the docks between Key Bridge and the proposed floating restaurant at the east end of zone 14. The advantage to this site is that a large building could be built without crowding the waterfront.

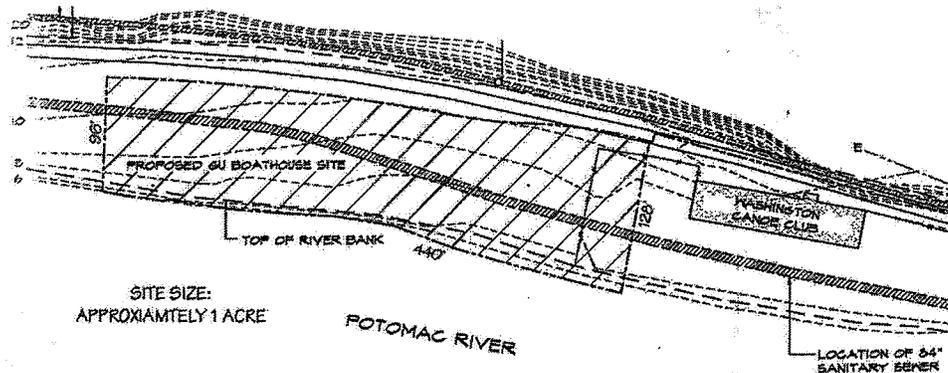


The Washington Canoe Club, Site 'B', Alexandria Aqueduct abutment, Potomac Boat Club, and Site 'C' (Townhomes & Jack's)
The Whitehurst Freeway and Key Bridge at right.

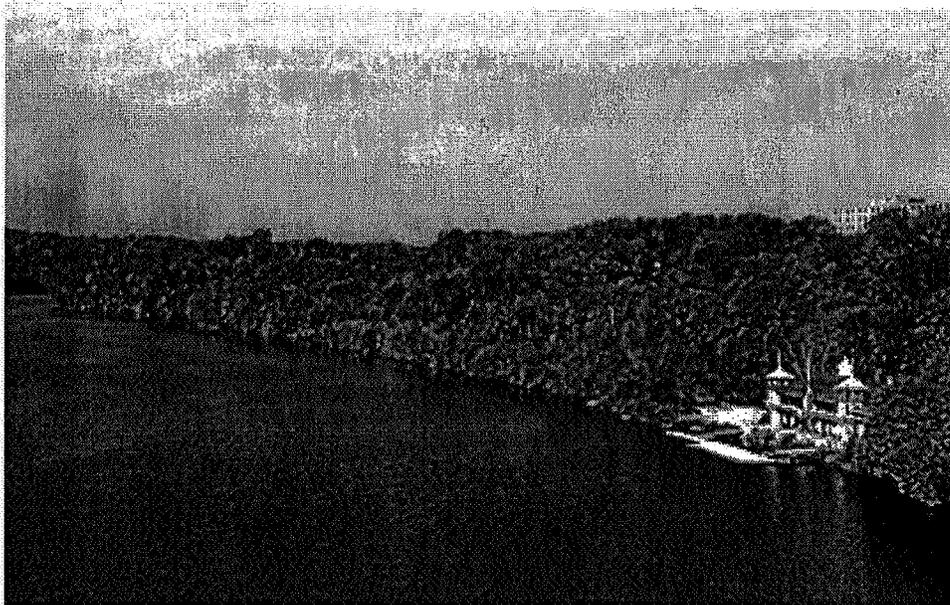
The Sites- March 2000 Evaluations

Site 'A'

This site continues to remain a viable location for an institutional boathouse. This site is now larger than identified in the 1989 study, encompassing approximately 1 acre. Georgetown University is currently in the process of completing a feasibility study of the site for its own boathouse. This boathouse may be up to 15,000 square feet and 5-bays, with a capacity for up to 60 eight-person shells. Should the university find the site acceptable, the NPS and Georgetown University would then consummate a pending land exchange agreement. This agreement would exchange ownership of this site for properties owned by the university along the Potomac Palisades upstream of the site. Site 'A' lies within the 100 year floodplain and the Potomac (Dulles) Interceptor Sewer runs through the length of the site. An easement for maintenance access to the sewer line by the District of Columbia Water and Sewer Authority is a requirement in the design of a facility on this site. Access to the site would be via a new one-way road constructed along the south side of the Capital Crescent Trail. No parking would be provided on site.



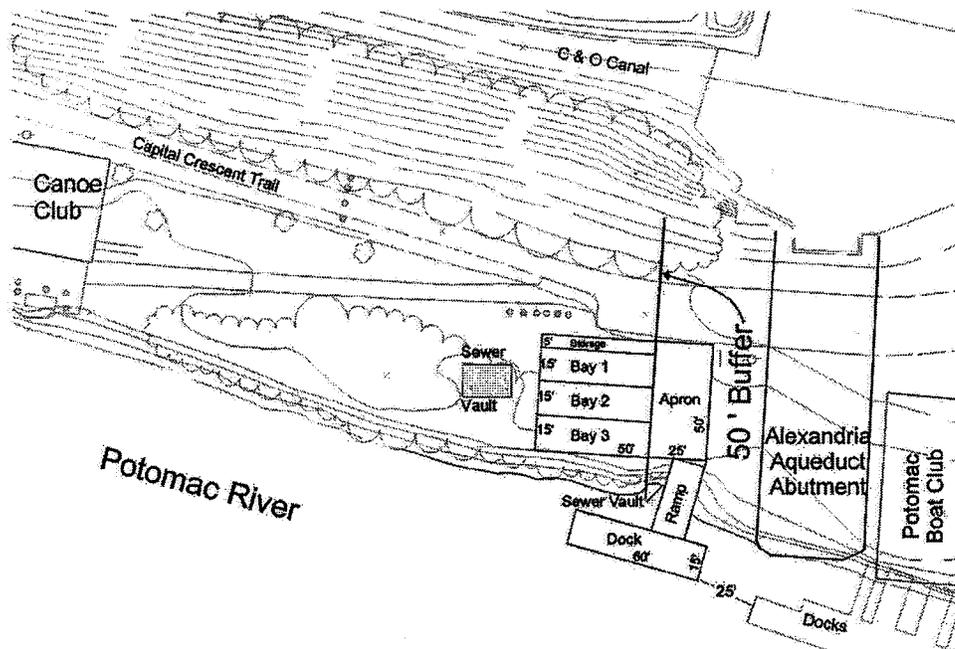
Sketch of Site 'A'



Looking upstream from Washington Canoe Club at Site 'A' & The Potomac Palisades
Draft Supplemental Nonmotorized Boating Study – Potomac River in Georgetown

Site 'B'

This site is no longer considered a viable site for an institutional boathouse (university or high school 8-person shells). However, it is viable as a site for a smaller boathouse, housing about 30 single or two person shells. The presence of the Alexandria Aqueduct abutment and the Potomac Interceptor Sewer vault are the two major constraints to the site. A 50-foot buffer is required by the National Park Service on the west side of the Aqueduct. The abutment is listed on the National Register of Historic Places and the NPS's List of Classified Structures. Due to the proximity of the Potomac Boat Club immediately on the east side of the structure, this buffer would protect the integrity of the structure and its visibility as an historic resource. The repair of the sewer vault would be required before this site could be developed. The presence of the sewer vault and sewer line on the site further limit the site's buildable area, because of the requirements of access to these structures. The site lies within the 100-year floodplain. Access to the facility would be from K Street. No parking would be provided on site.



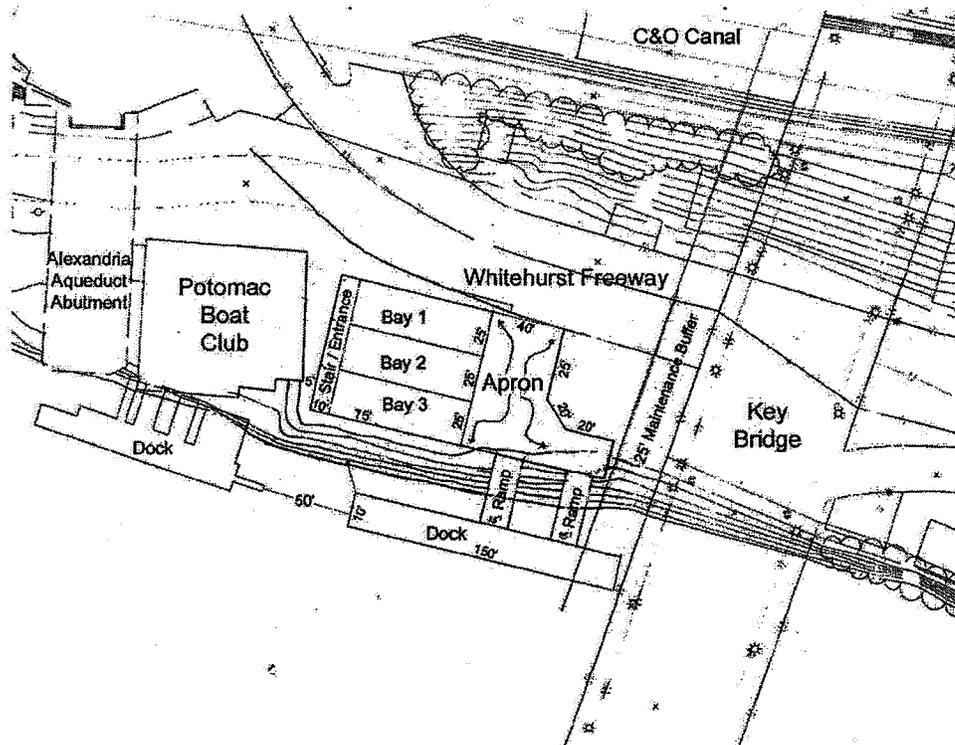
Sketch of Site 'B'

Site 'C'

This site continues to remain a viable location for a boathouse housing institutional programs, but is inadequate for a large university rowing program. A boathouse facility on this site could be constructed and operated by an NPS concessionaire of the National Park Service, and would house high school and small university programs. The facility, once constructed, would be owned by the NPS, and provide storage space for rent. Development of this site for a boathouse facility remains contingent upon the purchase and demolition of the three townhomes on the site and the accommodation of the existing rental operation.

Given these constraints, the site could still easily accommodate a 3 bay boathouse in the configuration diagrammed below. With a capacity for up to 36 eight-person shells, this size boathouse could potentially serve multiple institutional programs. A floating boathouse is no longer considered a viable alternative for this site due to the potential impacts on the river's boat traffic pattern. The existing rental operation might be accommodated within the boathouse or the area to the east of the apron (as diagrammed below). Movable storage racks might be placed within the 25-foot buffer and/or under Key Bridge.

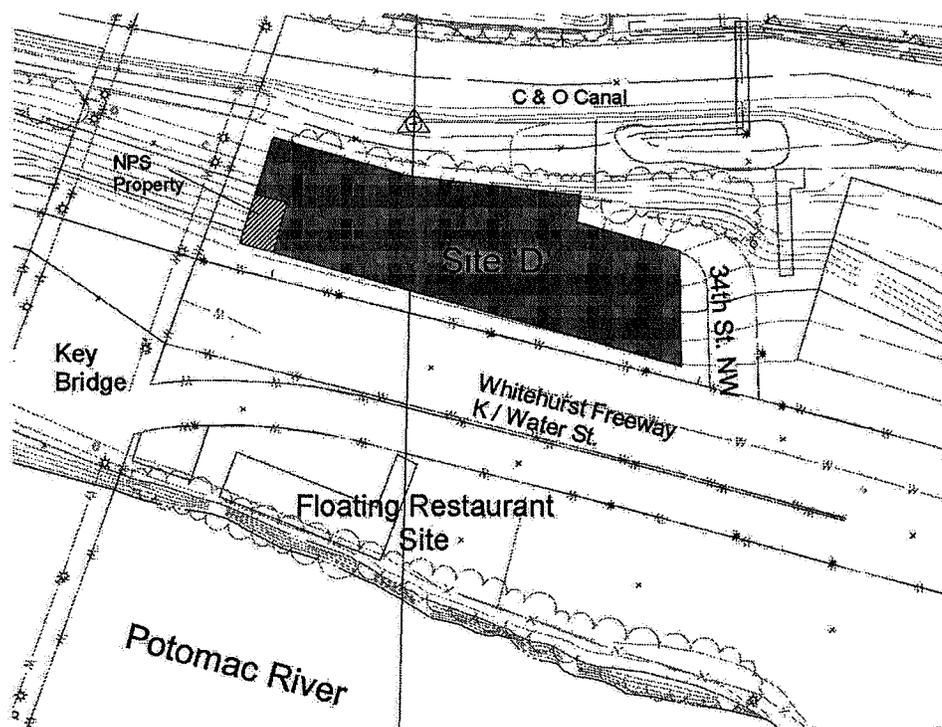
The site lies higher than sites 'A' or 'B' leaving most of it out of the 100-year floodplain. The District of Columbia Department of Public Works requires a 25-foot buffer for maintenance access to Key Bridge on the east edge of the site. Access to the facility would be from K Street. No parking would be provided on site.



Sketch of Site 'C'

Site 'D'

Most of this site is occupied by the former "Ice House" building. It is currently privately owned, with the exception of a small parcel which is owned by the NPS. The General Services Administration currently leases the privately owned portion of the building for its use. Users of a boathouse at this site would have to cross through the proposed parking lot on K Street in order to reach the ramp and docks on the river. This poses an unnecessary risk to the safety of the boathouse users and means a loss of parking spaces for the lot. The proposal for a floating restaurant identified in the 1989 study remains plausible and would limit the access to and size of the ramps and dock necessary to get boats to the river. The height of the shoreline above the river at this location is over 10 feet. *The NPS believes that at this height the ramps would extend far into the river, making them unstable and posing an impediment to boat traffic flow. Therefore, in order for ramps to safely reach a dock at river level, they must be cut into the shoreline of the river. Even short ramps at this location would congest and impede traffic flow and the operations of Potomac Boat Club, a potential boathouse at site 'C', and/or Jack's Canoes. However, other alternatives such as cranes do exist for lowering and retrieving shells from the river.* These factors, coupled with the *high* cost of developing it for boathouse use, make the site no longer feasible for the development of a rowing facility. The 1987 approved plan for the Georgetown Waterfront proposes this area be returned to open space. As funds become available the NPS *plans to* acquire the entire property, demolish the building, and integrate the site into the Georgetown Waterfront Park as landscaped open space.



Sketch of Site 'D'

Recommendations

The following is a list of recommended actions for each of the sites on the Georgetown Waterfront identified in the 1989 study, and a recommended direction for future rowing activities in the metropolitan area.

Site 'A'

It is recommended that this site continue to be evaluated by Georgetown University as a potential site for its collegiate rowing program. Should Georgetown find it suitable for its use, the NPS should complete the pending land exchange for the site with the university, giving both parties fee simple ownership of their respective desired properties. The potential 5-bay boathouse would serve the total needs of Georgetown University and would, therefore, free up space for other institutional programs in Thompson's Boat Center.

Site 'B'

It is recommended that a boathouse serving institutional (eights) rowing not be constructed on this site. Rather, that it be further investigated as a potential site for expansion of an existing entity's sculling (singles and doubles) storage space. It is further recommended that a structure built on this site be placed at least 50 feet from the Alexandria Aqueduct abutment and not atop the existing vault of the Potomac Interceptor Sewer Line

Site 'C'

It is recommended that this site be developed as a concessionaire operated boathouse facility. However, two requirements must be met prior to its development for a boathouse. First, some accommodation of the existing boat rental operation on site must be made. Second, the three townhomes on the site must be purchased and demolished to create enough buildable area for the site. The NPS believes that a three bay boathouse oriented parallel to the shore with the apron downstream, is the most feasible option for an institutional boathouse on this site.

Site 'D'

It is recommended that this site be eliminated from further consideration as a site for a rowing facility for the following reasons. First, the safety of rowers using the facility is of great importance to the NPS and the rowing community. Use of this site for storing boats would require rowers to traverse the K/Water Street parking lot to reach the river, posing an unnecessary hazard to rowers and an impediment to traffic within the lot. Second, the potential presence of the floating restaurant and the height of the shoreline above the river makes access to the water very difficult. These factors make this site no longer a viable option.

Conclusions

The Potomac River Safety Committee has established guidelines for the navigation and use of the Potomac River along the Georgetown waterfront. The traffic and traffic patterns generated by the potential facilities may require changes in the rules, guidelines and navigation patterns on the river. It is assumed that all boaters involved, would come together through this committee to coordinate the necessary changes.

The construction of these three additional boathouse facilities in Georgetown could provide storage space for an additional 144 eight-person shells. This represents an over 150% increase in the current capacity for permanent indoor storage of institutional shells in Georgetown. A boathouse on the Virginia shore could add storage for 36 additional eight-person shells, for an almost 175% increase in institutional storage on the Upper Potomac (not including Alexandria). *The increase in available rack space at Potomac Boat Club, Site 'C', and the Virginia waterfront could serve the storage demands of small and growing institutional programs. However, there are currently a large number of shells housed within a temporary compound adjacent to Thompson's. These shells would most likely fill available racks within Thompson's leaving few if any racks for new shells.* A small boathouse at Site 'B' could potentially accommodate 30 sculling shells for private rowers. A facility in Virginia could also accommodate small sculling shells.

There is a high probability that Georgetown University will construct a 5-bay 60 shell capacity boathouse at site 'A'. There is also a high potential that George Washington University will construct a 4-bay 48-shell capacity boathouse elsewhere on the Georgetown Waterfront. The potential also exists for a boathouse of at least 3 bays and 36-shell capacity on the Virginia shore of the Potomac. In addition, site 'C' remains viable as a site for a 3-bay 36-shell capacity boathouse. These considerations lead the NPS to the conclusion that these three potential facilities listed above could meet the current and *near* future demands for boat storage on the upper Potomac River. It is the conclusion of the NPS that it is not necessary to investigate other sites along the Georgetown Waterfront for development of a boathouse facility. The NPS recognizes the substantial demand for rowing facilities in the Washington metropolitan area. It also recognizes its mandate to protect the open spaces along the shoreline of the Potomac River as a resource for all the citizens of our nation. The NPS therefore holds that the potential construction of four boathouse facilities, three in Georgetown, and one along the Virginia shore, are the maximum number of additional boathouses which should be constructed in this upper Potomac River rowing area. Thus any additional demand for shell *storage in the Washington metropolitan area* will be the subject of *additional studies, including* the Vision Plan for Anacostia River in the years 2000-2001. It is also felt that the Potomac and Anacostia rivers have a "carrying capacity" for activity of all kinds. This "carrying capacity" is and will continue to be considered in all planning for these rivers.



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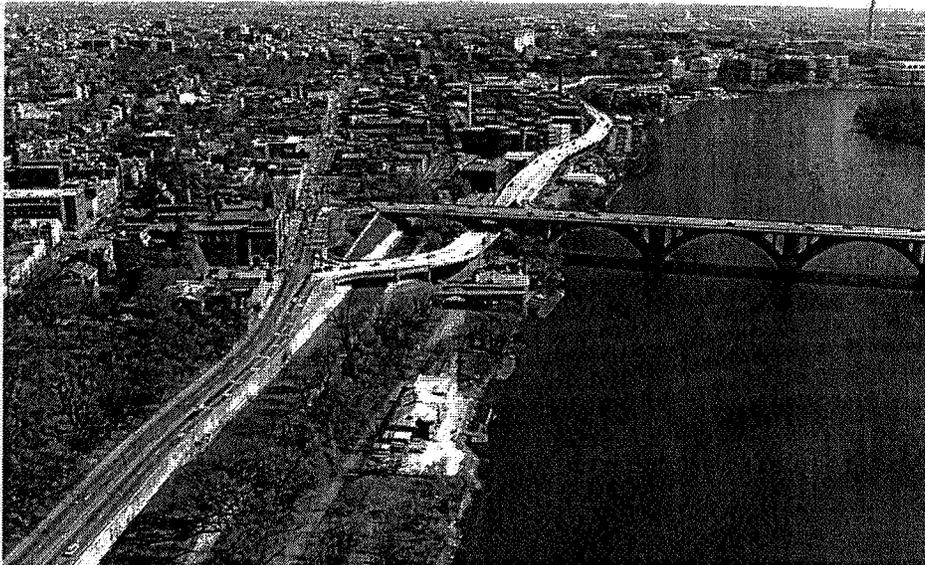
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The Potomac River Shoreline through Georgetown
(Including the Georgetown Waterfront Park)

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