Washington Canoe Club
3700 WATER STREET, NW
WASHINGTON, D.C. 20007

6/27/2003

Director, Office of Zoning
Suite 210
441 4th Street, N.W.
Washington, D.C. 20001

REF: **Case No. 02-30 (Georgetown University & U.S. National Park Service)**

Dear Ms Mitten:

Attached are the viewgraphs of my testimony. Additionally attached are portions of the Potomac River Safety Committee Safety Guide. In particular the written descriptions of shell traffic (rowers) and the attention to the portion of the Potomac River between Washington Canoe Club and "Hens and Chickens" is relevant. Shells are instructed to stay away from there for reasons of safety.

VR,
/s/
Michael Harbold
441 P St, NW
Washington DC 20007

ZONING COMMISSION
District of Columbia
Case 02-30
Exhibit 369

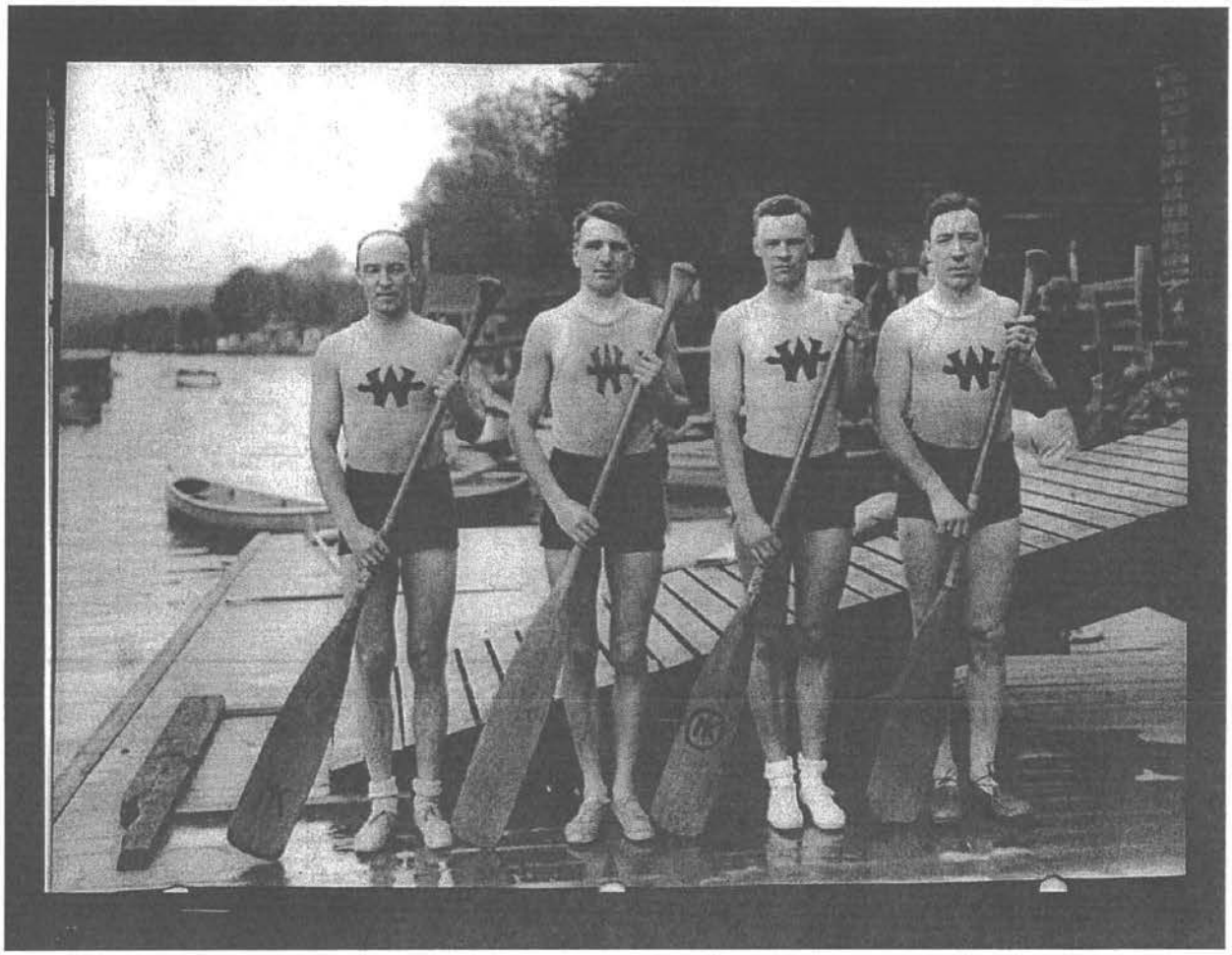
ZONING COMMISSION
District of Columbia
CASE NO.02-30
EXHIBIT NO.369

Washington Canoe Club



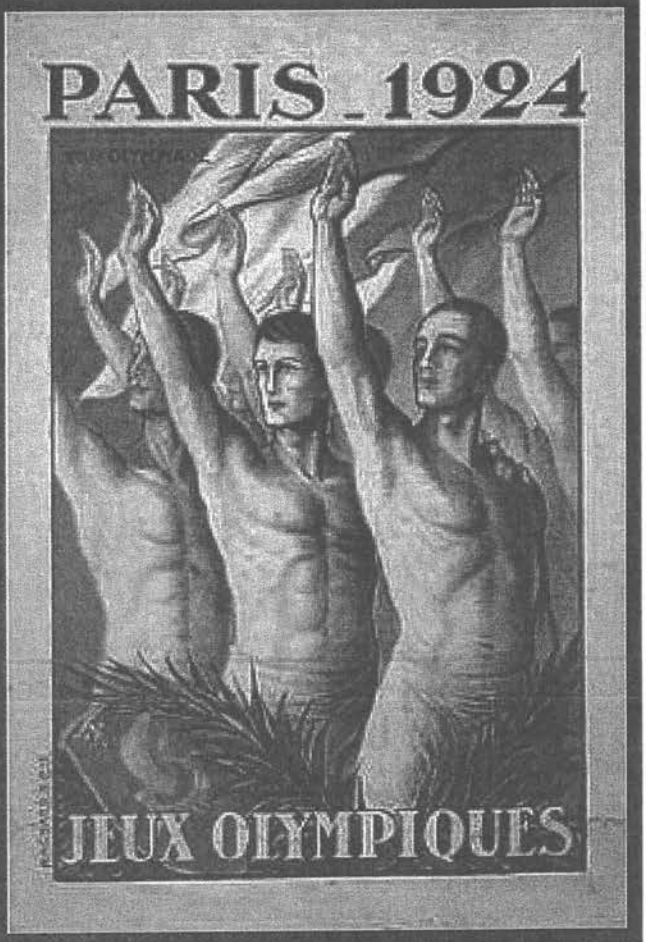
est. 1904

Washington Canoe Club is credited with introducing the Olympic Sport of Canoe / Kayak 1924 - Paris



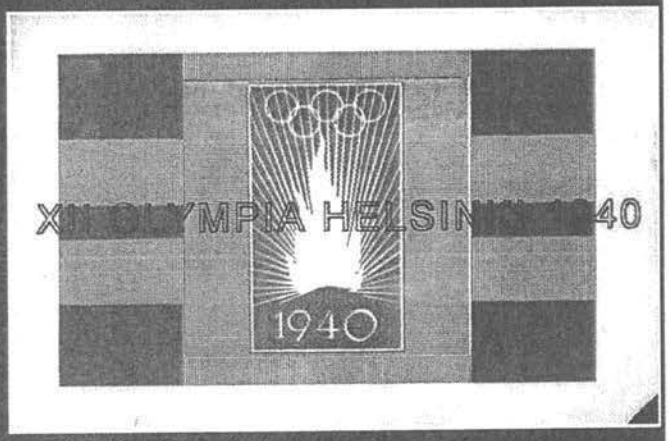
Our Club Members have been on almost every Olympic Team since then…

Charles Havens
Harry Knight
Karl Knight
Hank Larcombe



1924
Paris

W. Havens Jr.
Edward Trilling



Cancelled because of World War II

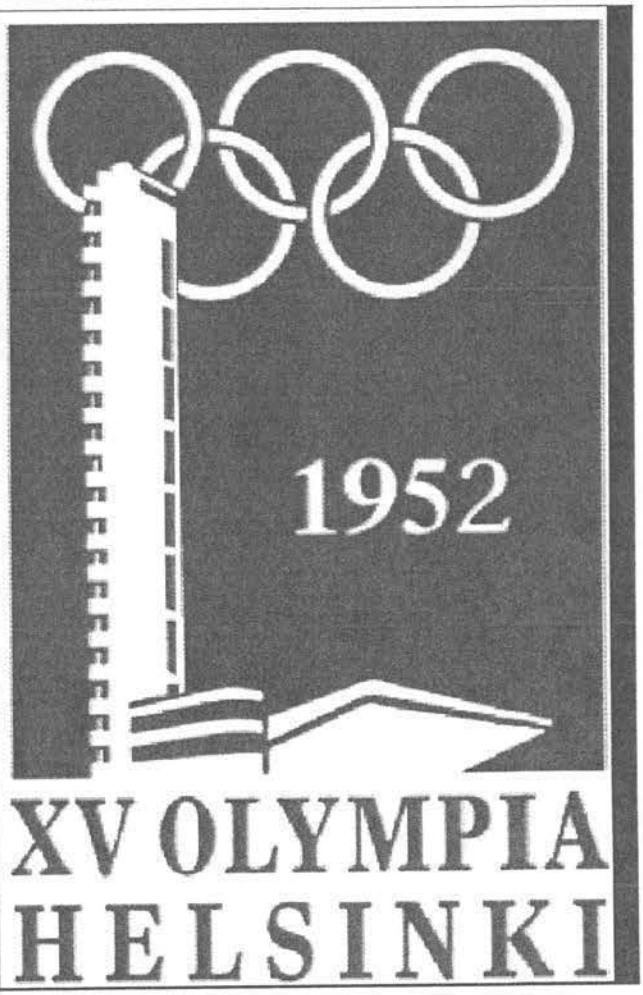
1940
Helsinki

Frank Havens
William B. Havens



1948
London

Ruth DeForest
Frank Havens
William Schuette



1952
Helsinki

Frank Havens
William Schuette



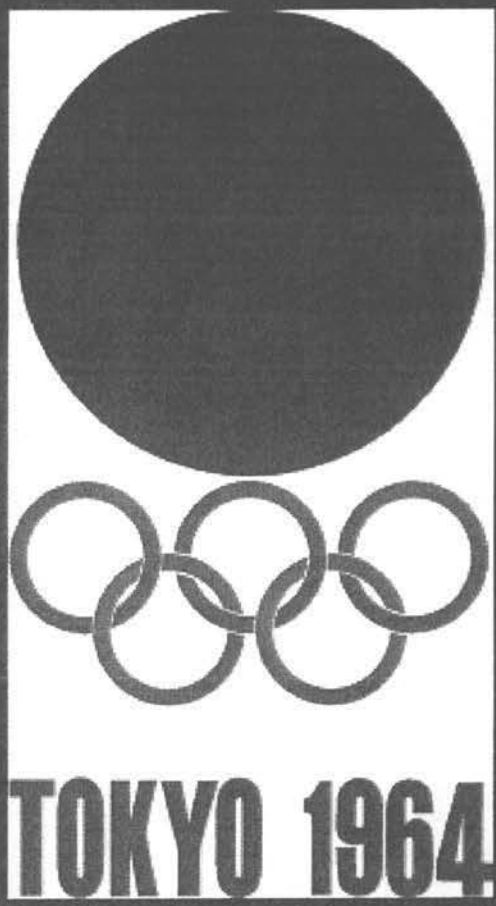
1956
Melbourne

Frank Havens
Charles Lundmark
Gloriane Perrier



1960
Rome

FRANCINE FOX
GLORIANNE PERRIER
Denis Van Valkenburgh



1964
Tokyo

Francine Fox
Andreas Weigand
Peter Weigand



1968
Mexico City

Jack Brosius
Linda Dragan
Nancy Purvis
Andreas Weigand
Al Whitney



1972
Munich

Linda Dragan
Andreas Weigand



1976
Montreal

THERESA HAUGHT
ANDREAS WEIGAND
LINDA DRAGAN



-Boycott-

1980
Moscow

Norman Bellingham
David Halpern
Bruce Merritt
Dan SCHNURRENBERGER



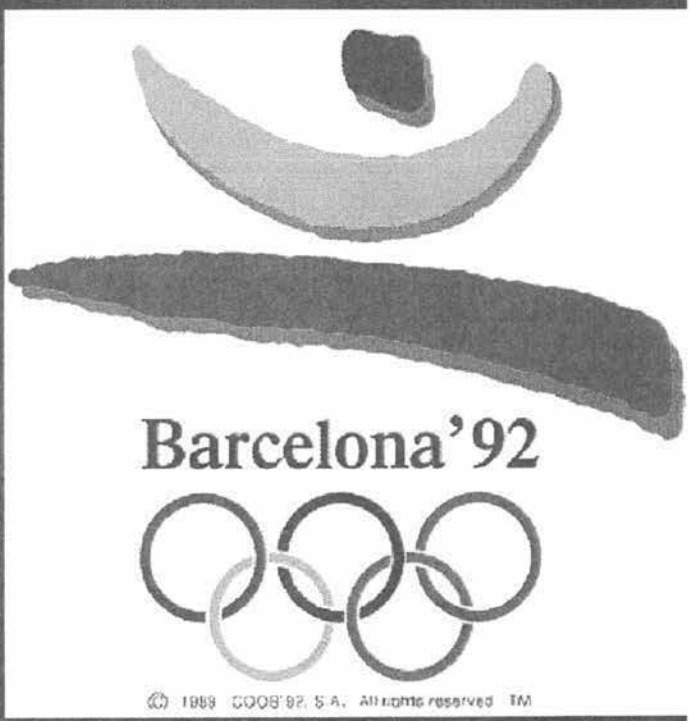
1984
Los Angeles

Norman Bellingham
Mark Hamilton
Michael Harbold
Theresa Haught
Bruce Merritt
Sandor Nyerges



1988
Seoul

Norman Bellingham
Alexandra Harbold
Michael Harbold



1992
Barcelona

Alexandra Harbold
Michael Harbold

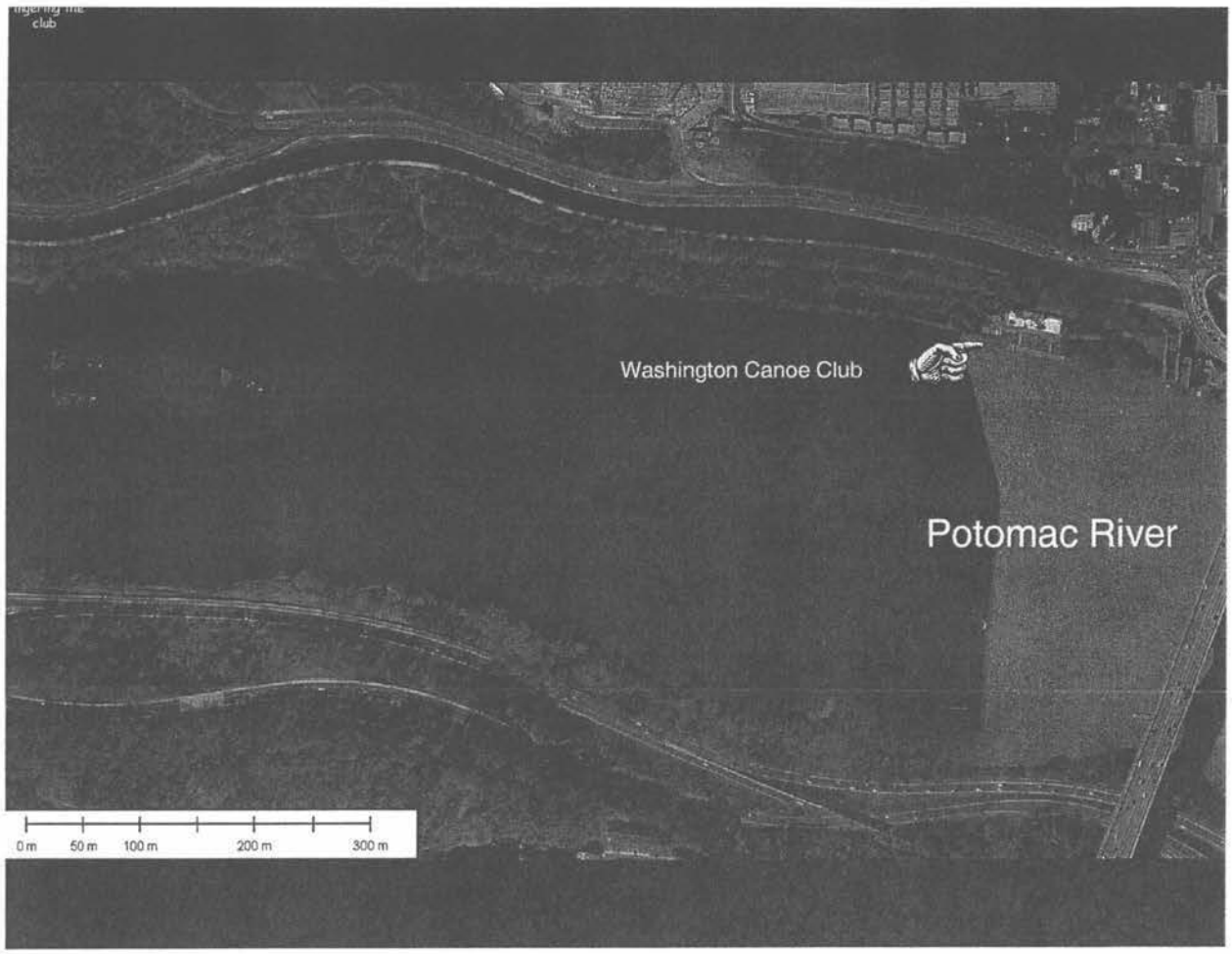


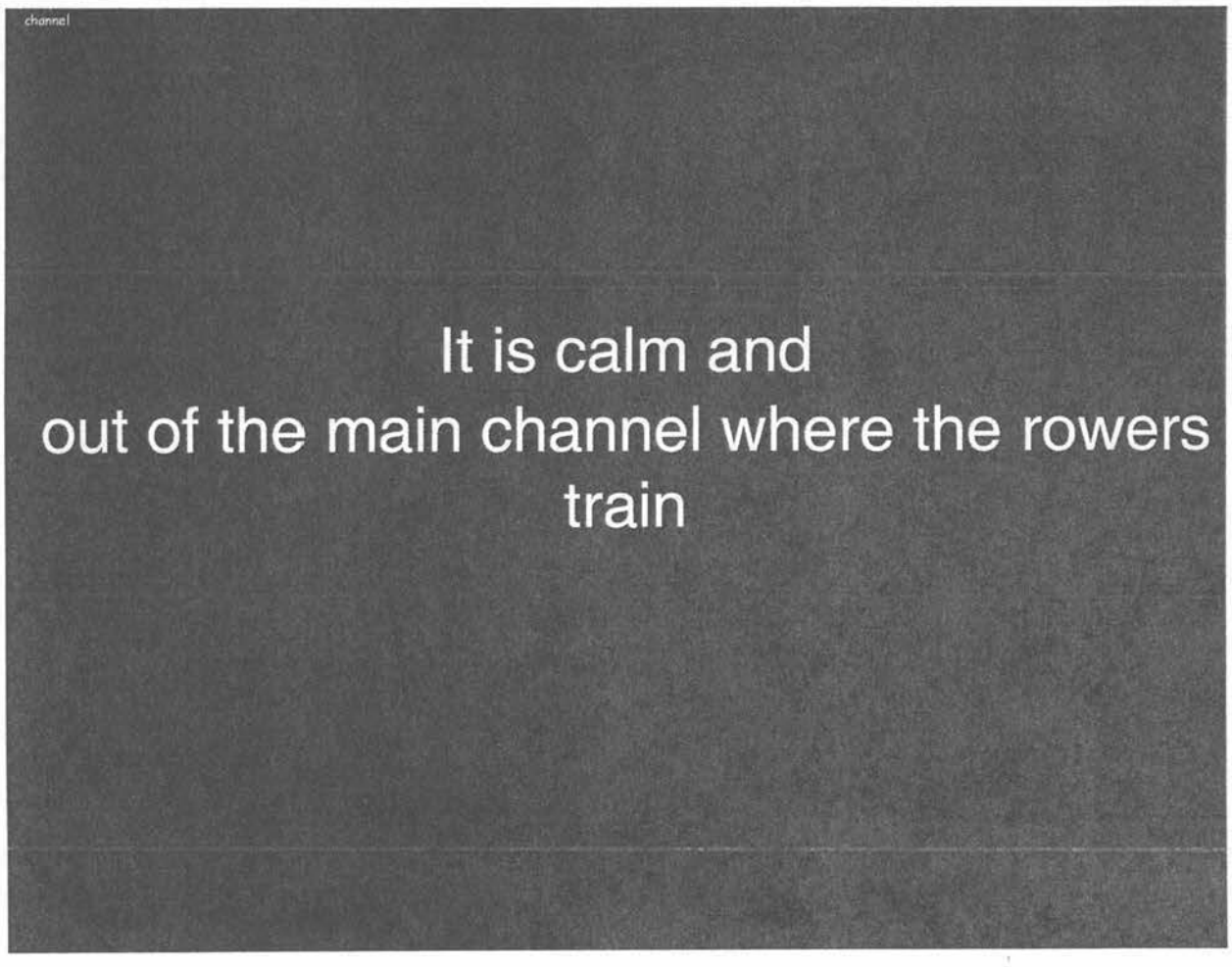
1996
Atlanta

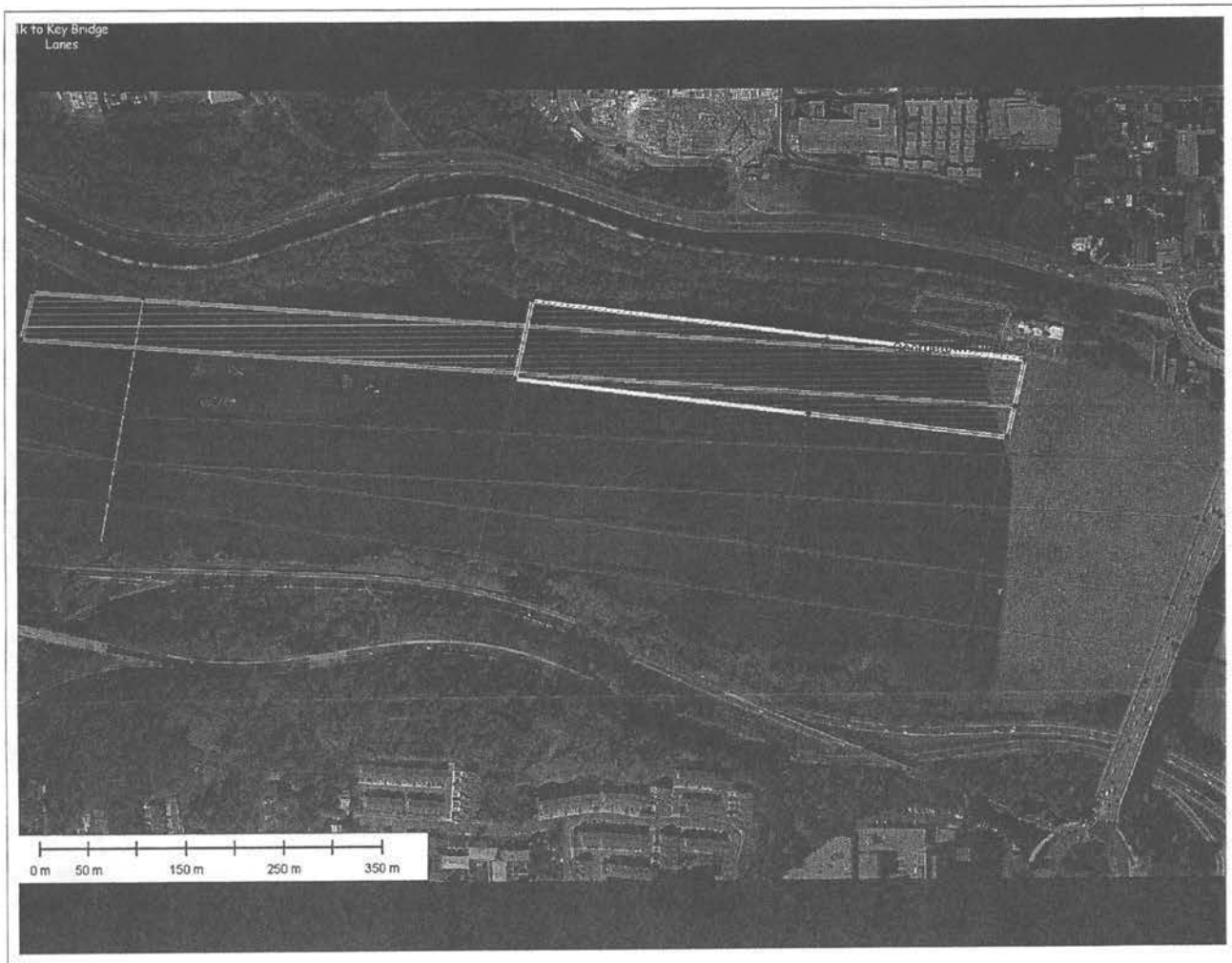
It's the water

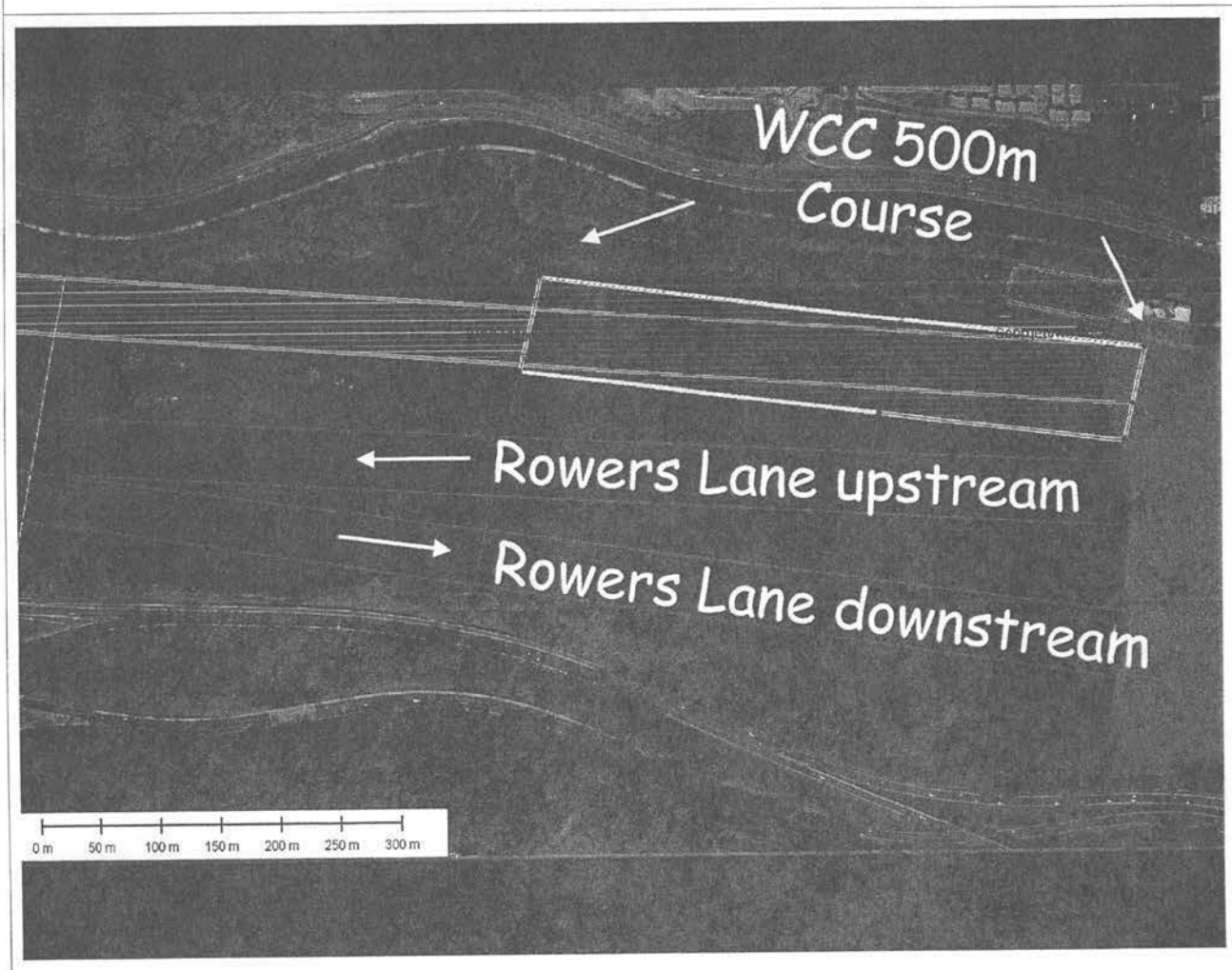
What Makes WCC Excel is the Water

Unlike Philadelphia or Boston – the Potomac rarely freezes for more than 3 weeks a year. Little need for indoor water training (like a rowing tank). Canoe / Kayakers have the option of using the David Taylor Model Basin (indoor 500 meter pool). It's almost never used – the Potomac rarely freezes.

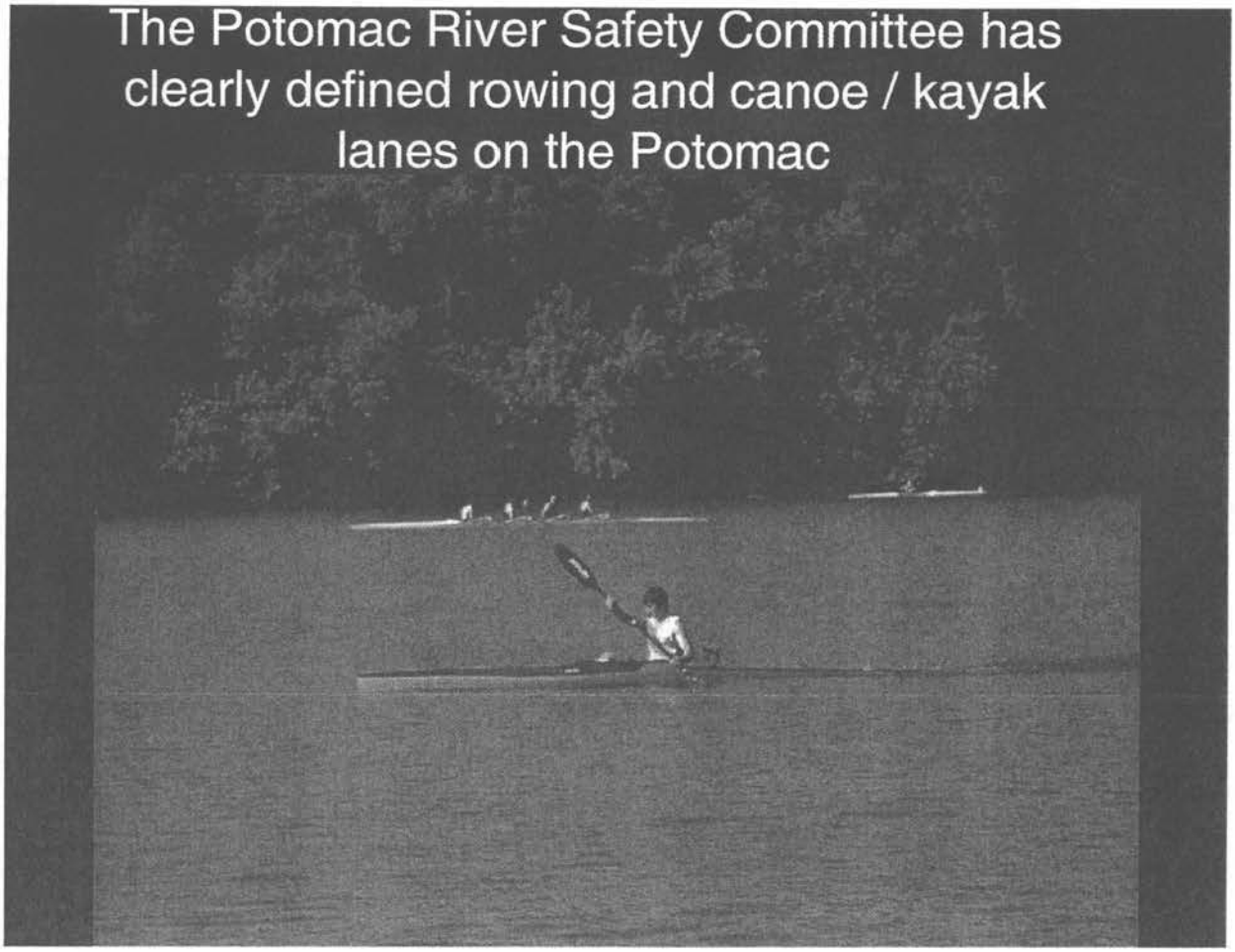

club
Washington Canoe Club
Potomac River
0 m
50 m
100 m
200 m
300 m


channel
It is calm and
out of the main channel where the rowers
train


lk to Key Bridge
Lanes
0 m
50 m
150 m
250 m
350 m

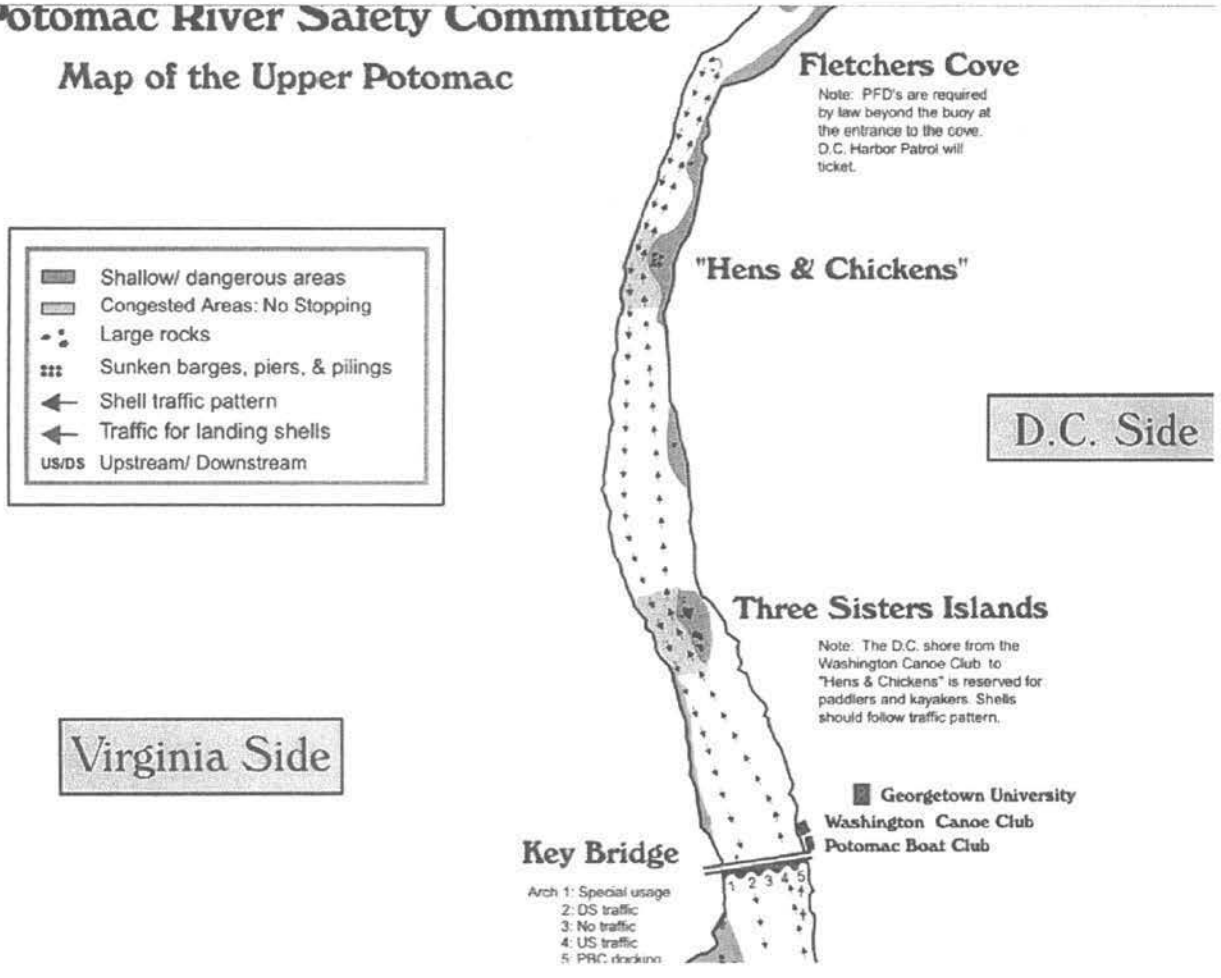

WCC 500m
Course
Rowers Lane upstream
Rowers Lane downstream
0 m
50 m
100 m
150 m
200 m
250 m
300 m

The Potomac River Safety Committee has clearly defined rowing and canoe / kayak lanes on the Potomac



Potomac River Safety Committee

Map of the Upper Potomac



The users of the area agree to the local practices:

"The safety committee shall be composed of representatives of:

Georgetown University Crew
Georgetown Local Organizing Committee (GLOC) (for the NCASRA)
George Washington University Crew
Potomac Boat Club
Thompson Boat Center
Washington Canoe Club

Individuals designated by the current committee as a whole."

PRSC Members

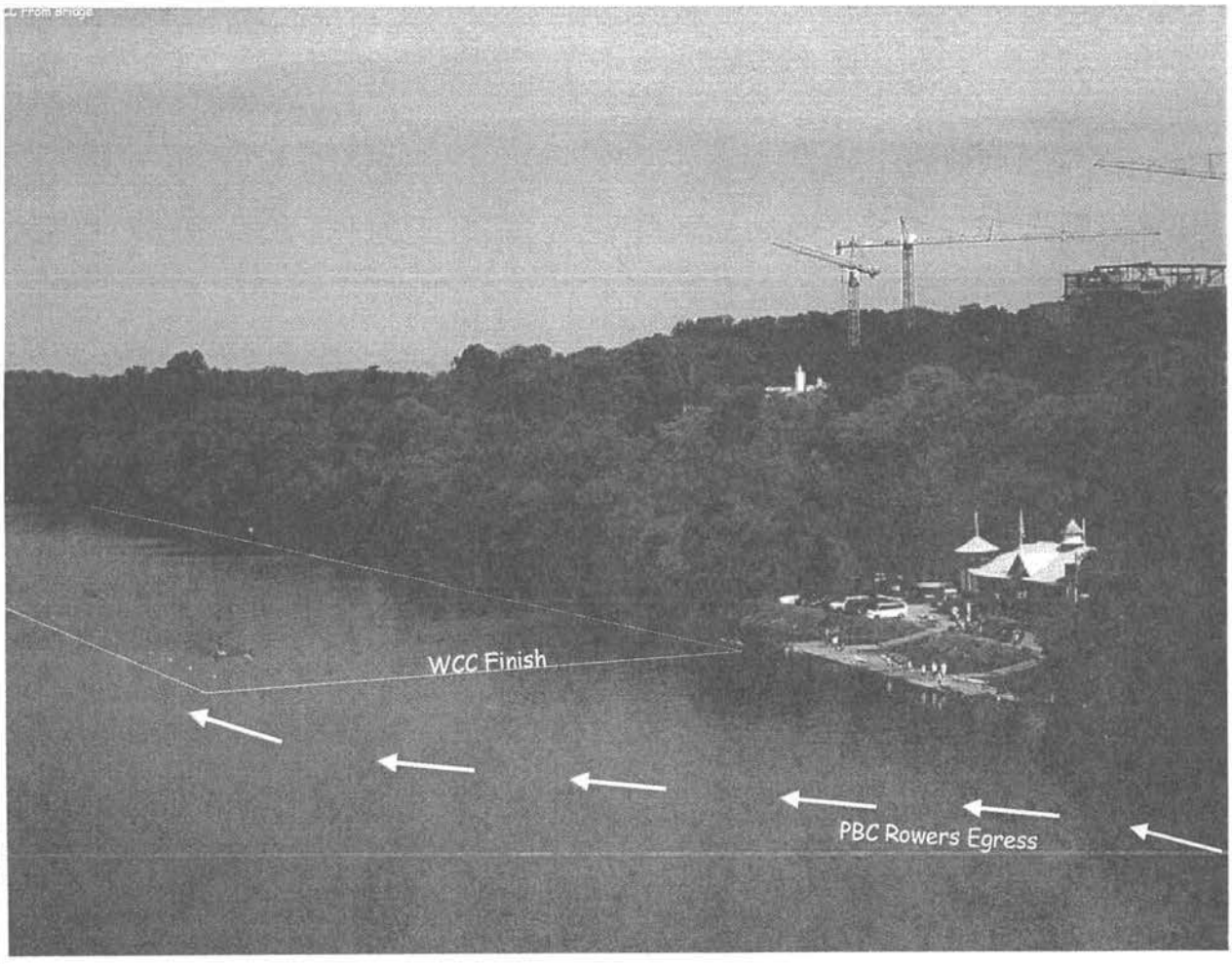
·Current Member of the PRSC

Emanuel Caudron- Thompson Boat Center (TBC) Manager
Gretchen Ellsworth- Regatta Director for GLOC and Vice President of the NCASRA
Mike Harbold- Commodore of the Washington Canoe Club
Tony Johnson- Head Coach of Georgetown University Crew
George Kirschbaum- Coach and coxswain, P.R.S.C. Acting Chairman, draftsman
Steve Peterson- Head Coach of George Washington University Crew
Lenore Pomerance- Potomac Boat Club rower and rep.
Matt Russell- Walt Whitman Men's Coach (GLOC)
Margo Shuster- At-Large rep. and Chair, USRowing Masters Committee
Bryan Tylander- Wilson High School Coach (GLOC)
John White- USRowing Judge/Referee

·I. River Traffic Patterns and River Hazards:

• These are directions for rowers/crews. Paddlers and kayakers should contact the Washington Canoe Club Aquatics Committee. Users of rental boats should consult the rental agency for information. Notation of river traffic starts at Fletcher's Cove and works progressively downstream. Most information concerns rowing shells.

For simplicity ***US*** = upstream, and ***DS*** = downstream

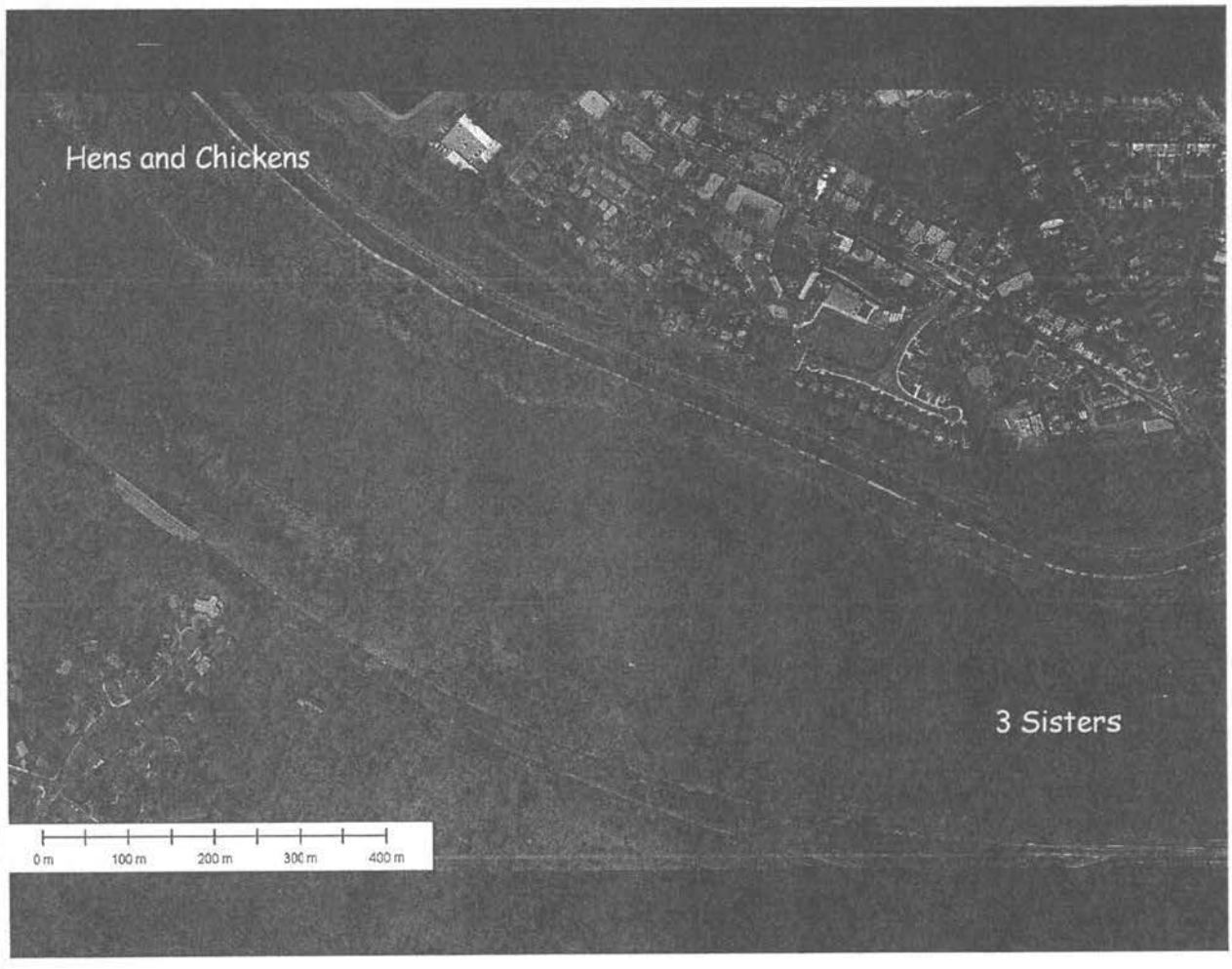


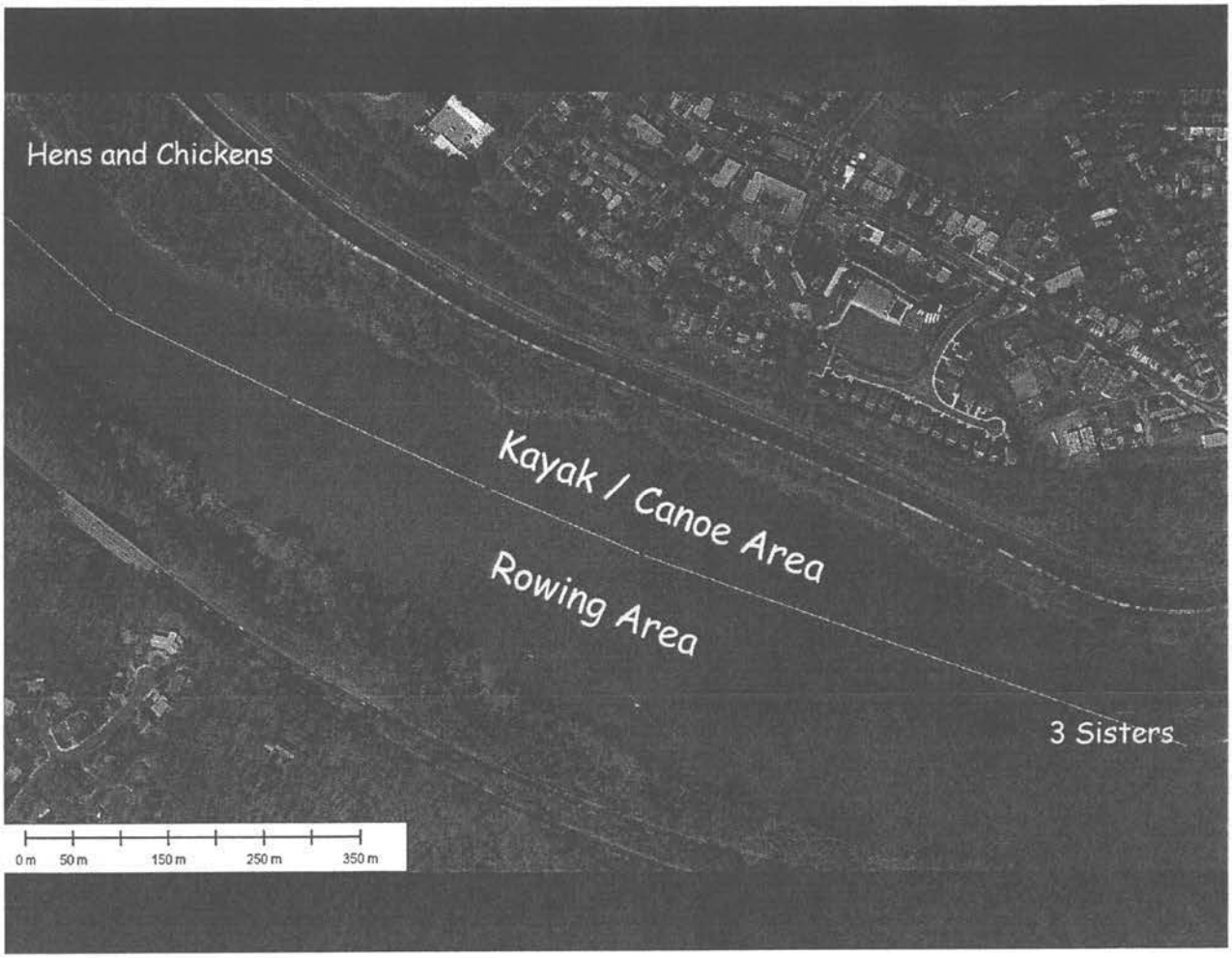
·B. Hens and Chickens

1. ***DS*** *Crews must follow the VA shoreline closely at all times. The area is prone to congestion and is narrow.*
2. ***US*** *Crews should follow a near straight line from Three Sisters Islands to the Hens and Chickens.*

- In the area between the Three Sisters Islands, and the Hens and Chickens, slow moving crews or crews wishing to do drills should slide to the D.C. side of the river to avoid faster moving traffic going US. However, crews must be aware that the river area 250 meters from the D.C. shore is used by and the domain of canoes and kayaks.

·Potomac Boat Club website
-http://www.rowpbc.net/safety.html





Rivers and Harbors Act

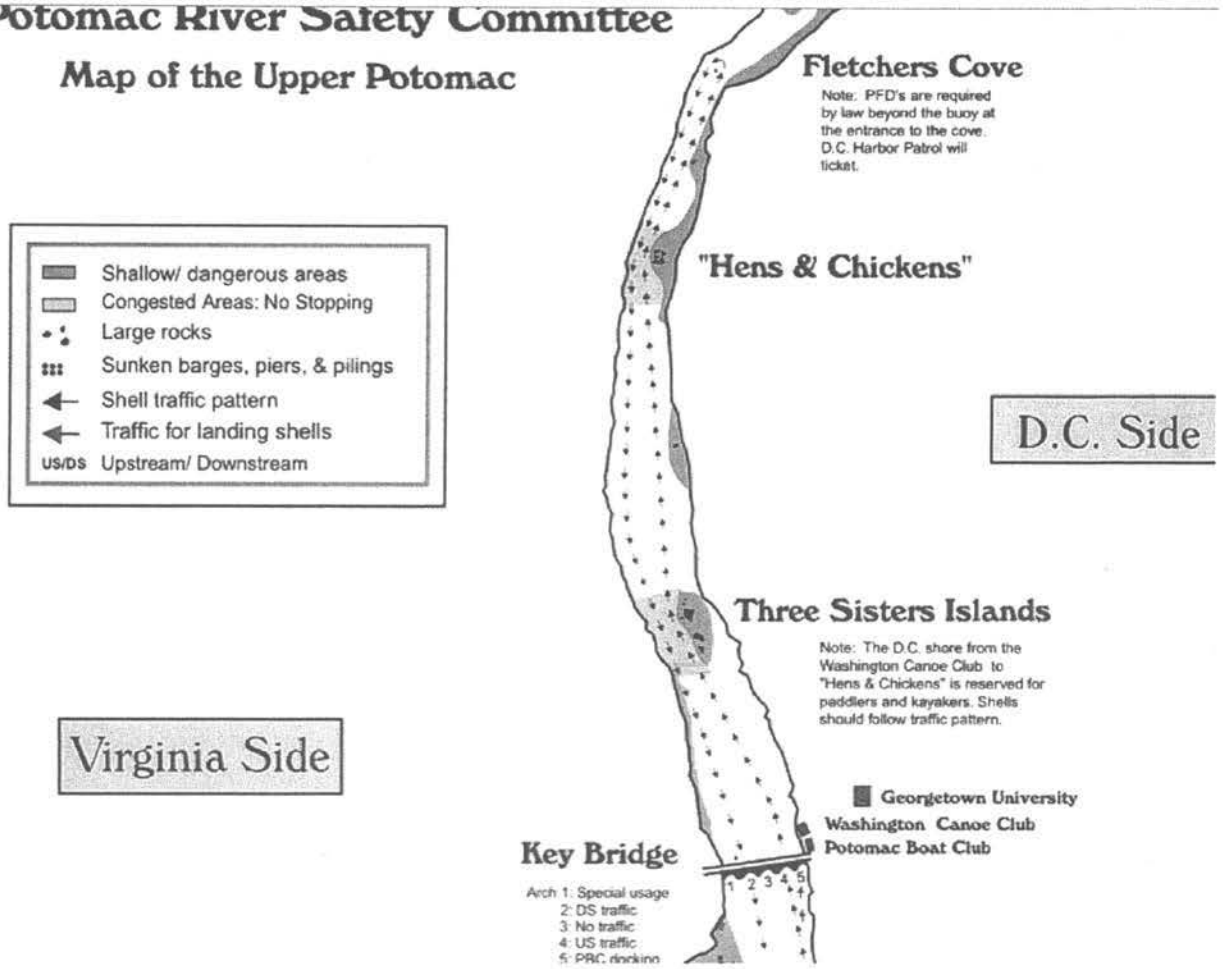
Section 10 of the Rivers and Harbors Act of 1899

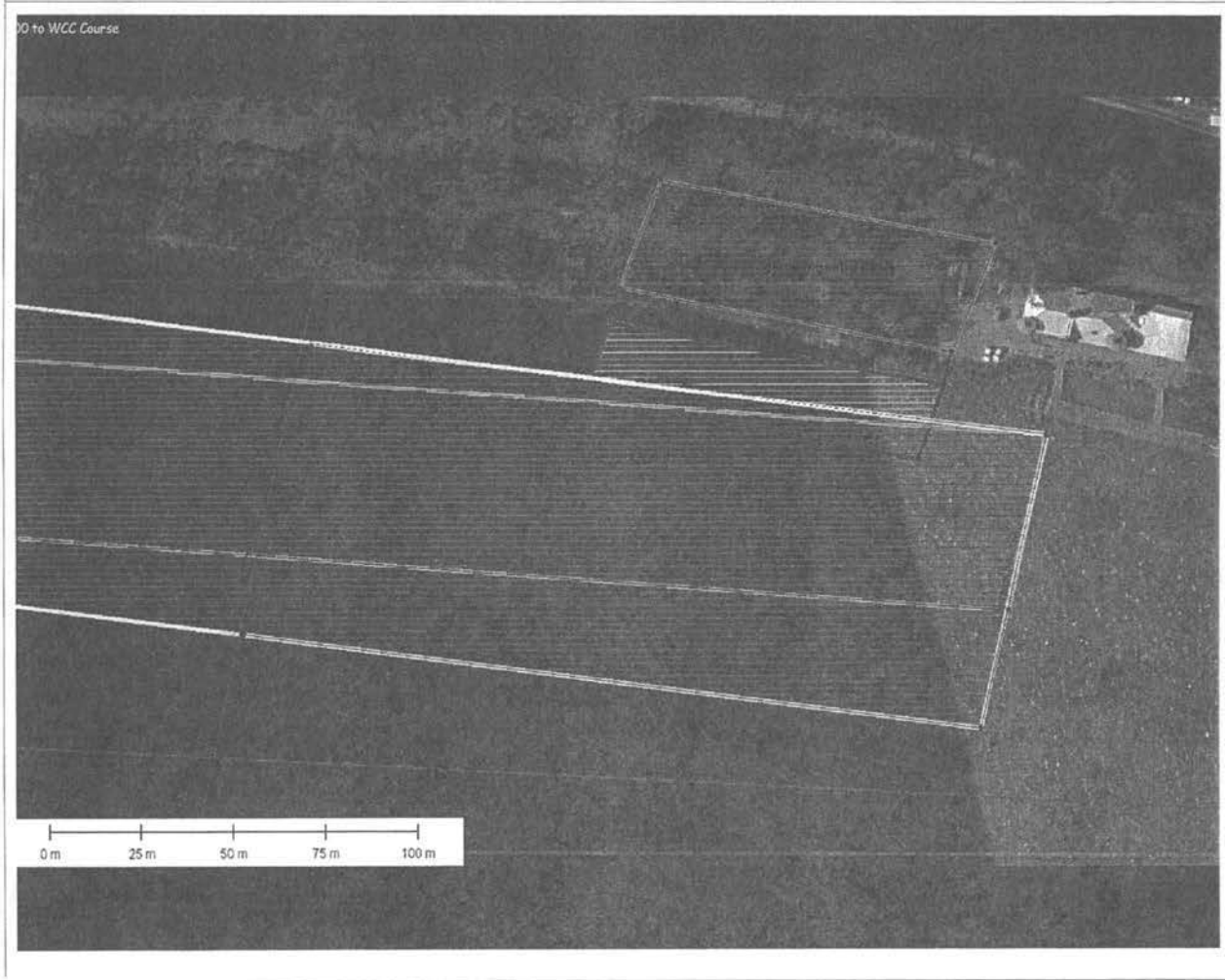
33 U.S.C. 403

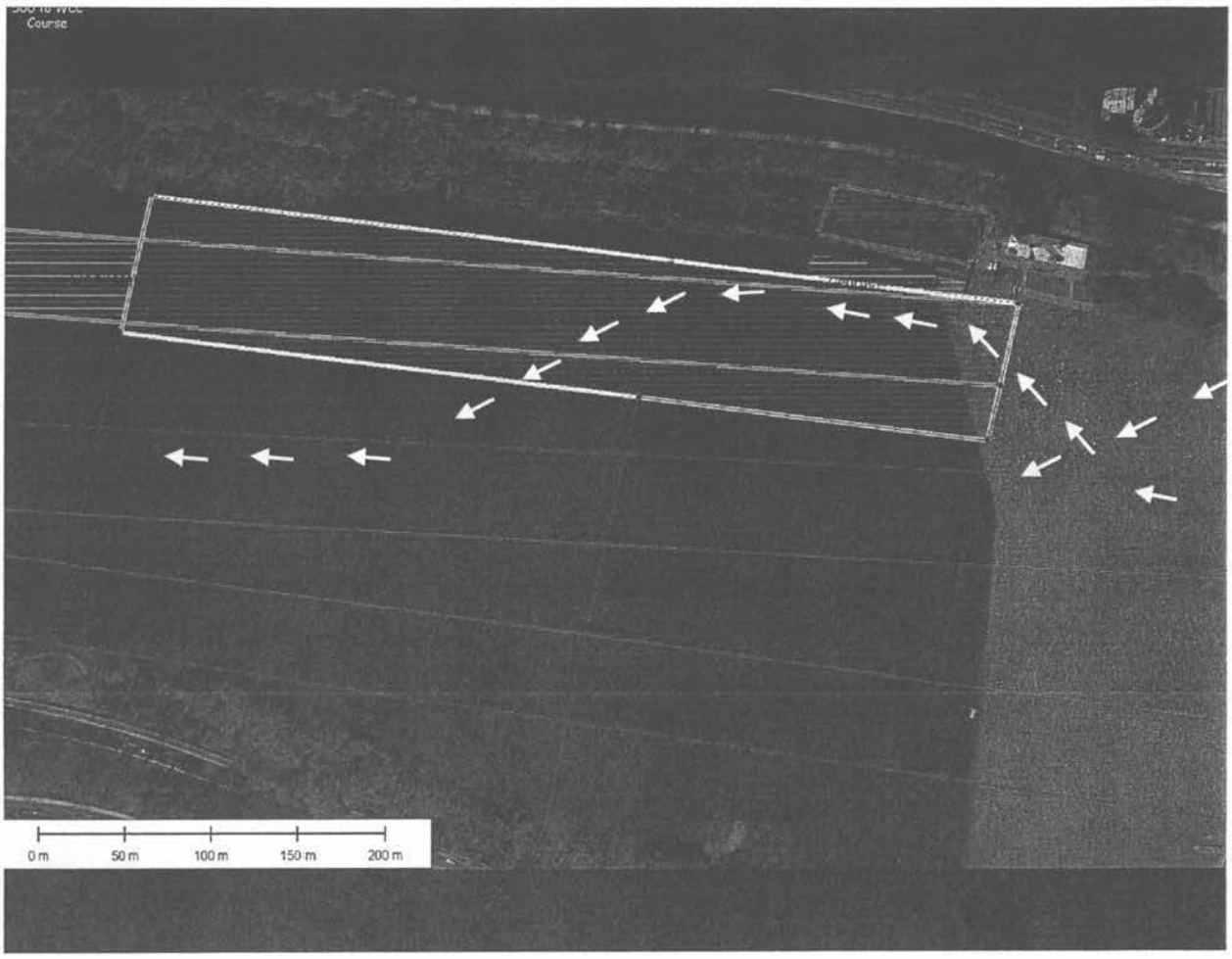
That the creation of any obstruction not affirmatively authorized by Congress, to the navigable capacity of any of the waters of the United State is hereby prohibited; and it shall not be lawful to build or commence the building of any wharf, pier, dolphin, boom, weir, breakwater, bulkhead, jetty, or other structures in any port, roadstead, haven, harbor, canal, navigable river, or other water of the United States, outside established harbor lines, or where no harbor lines have been established, except on plans recommended by the Chief of Engineers and authorized by the Secretary of War; and it shall not be lawful to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor of refuge, or inclosure within the limits of any breakwater, or of the channel of any navigable water of the United States, unless the work has been recommended by the Chief of Engineers and authorized by the Secretary o War prior to beginning the same.

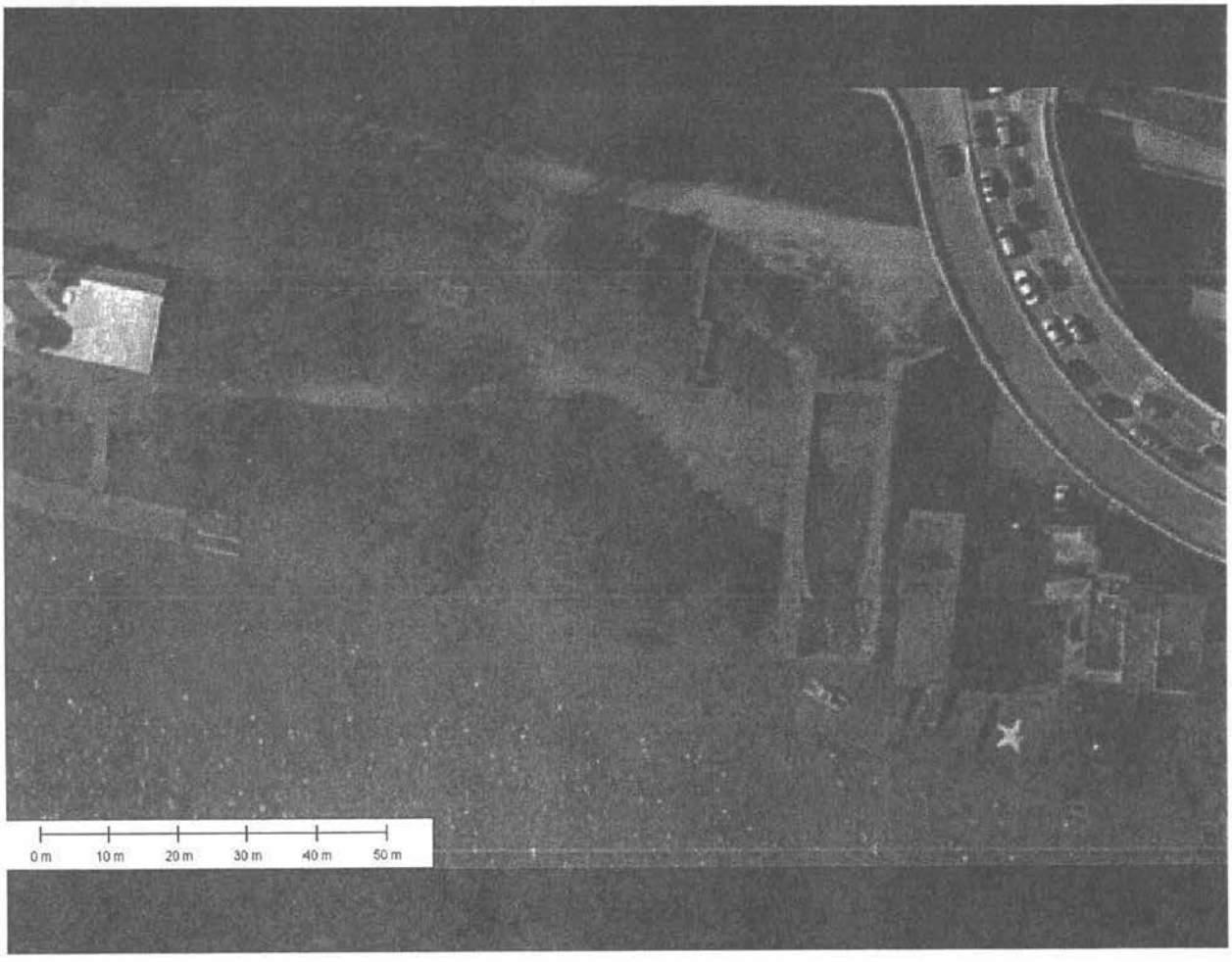
Potomac River Safety Committee

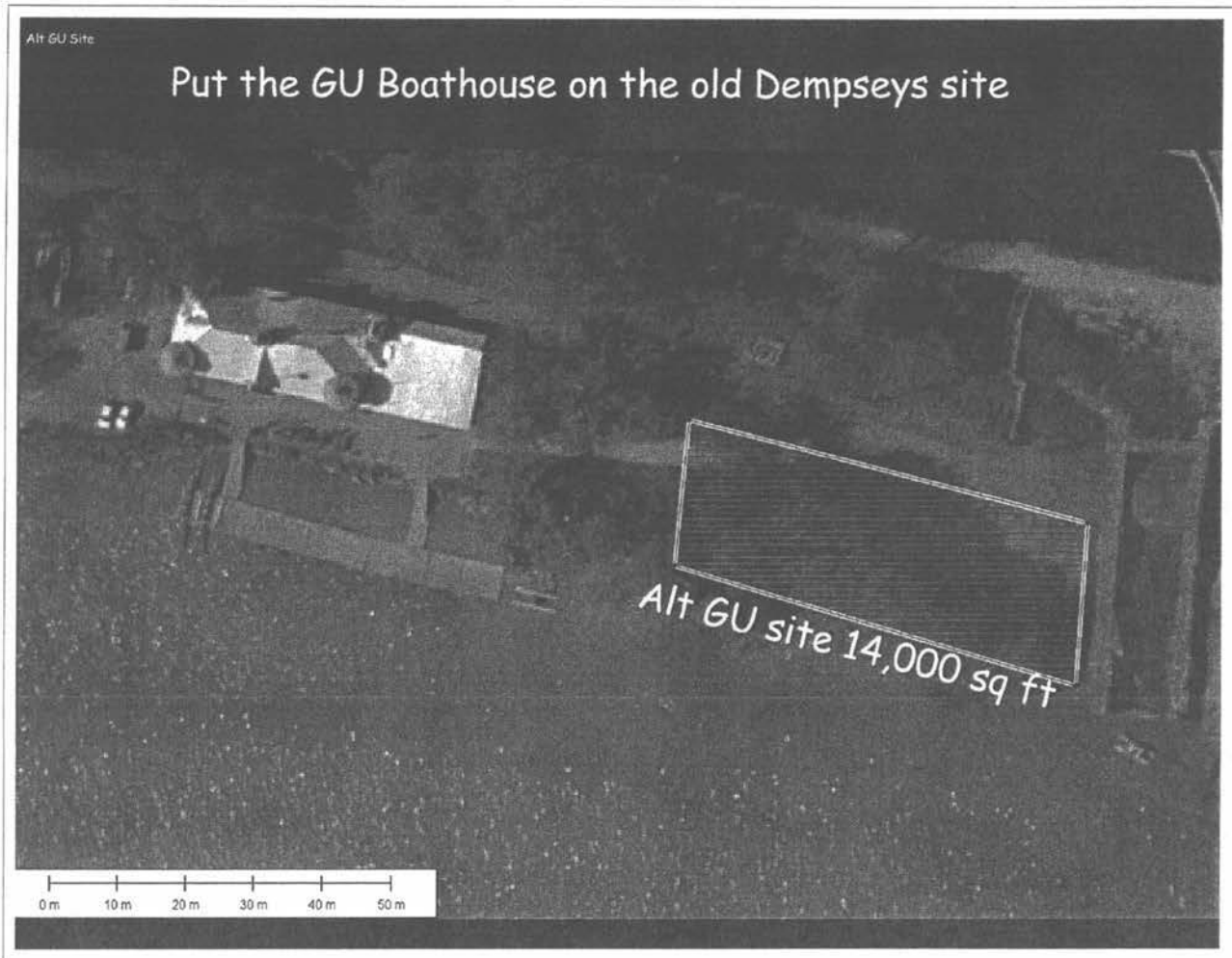
Map of the Upper Potomac

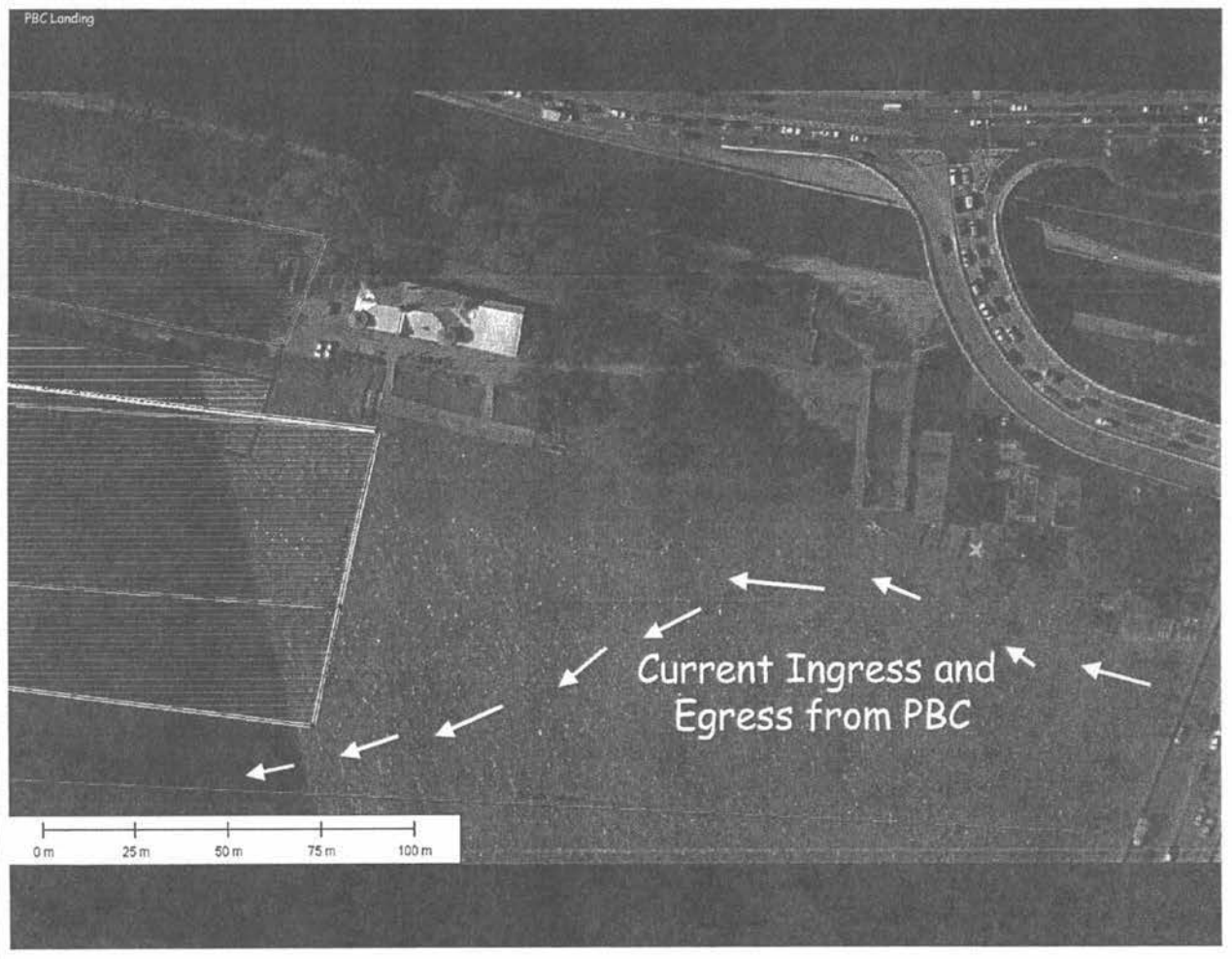


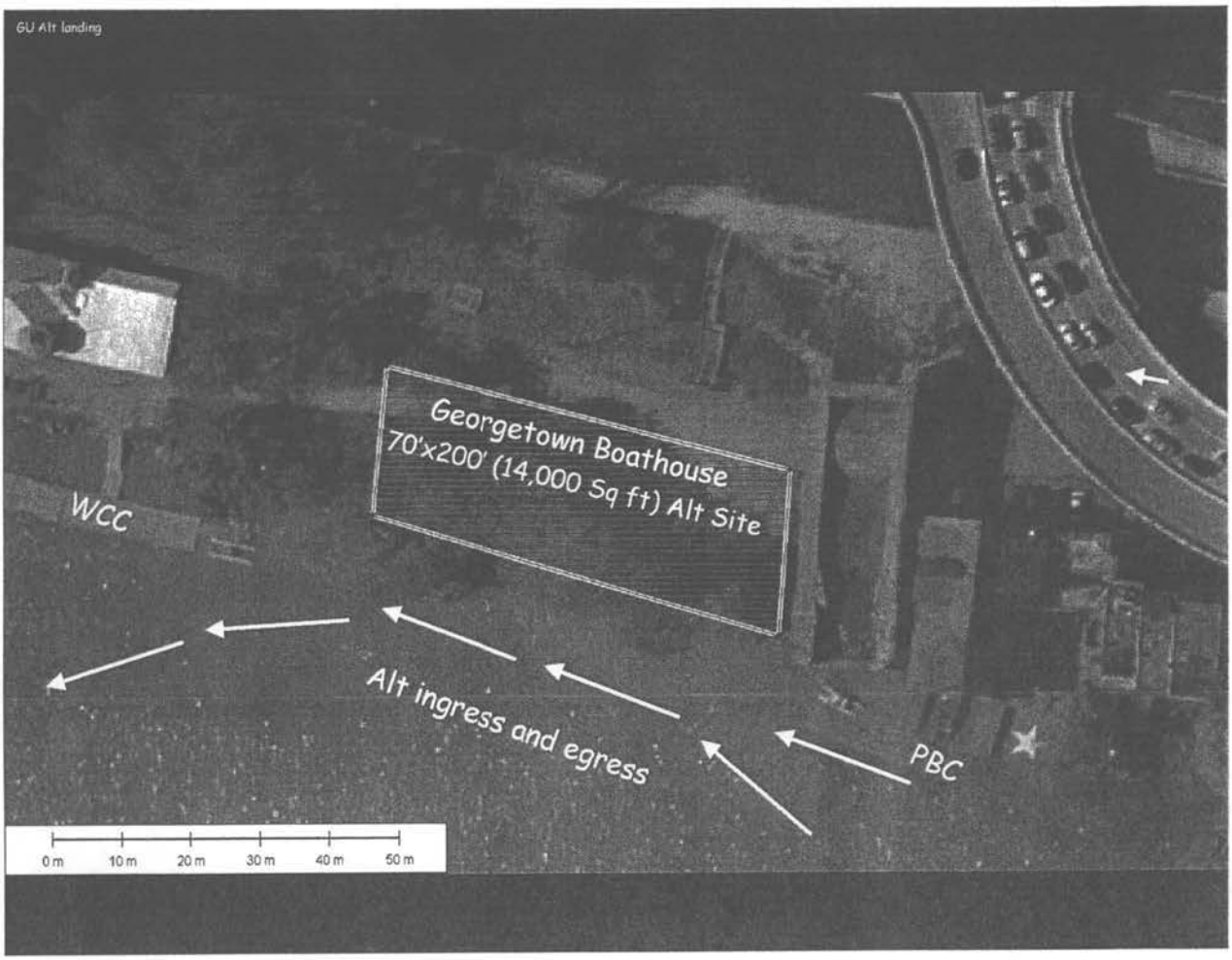



Course
0 m
50 m
100 m
150 m
200 m


0 m
10 m
20 m
30 m
40 m
50 m


Alt GU Site
Put the GU Boathouse on the old Dempseys site
Alt GU site 14,000 sq ft
0 m
10 m
20 m
30 m
40 m
50 m


PBC Landing
Current Ingress and
Egress from PBC
0 m
25 m
50 m
75 m
100 m



Rivers and Harbors Act

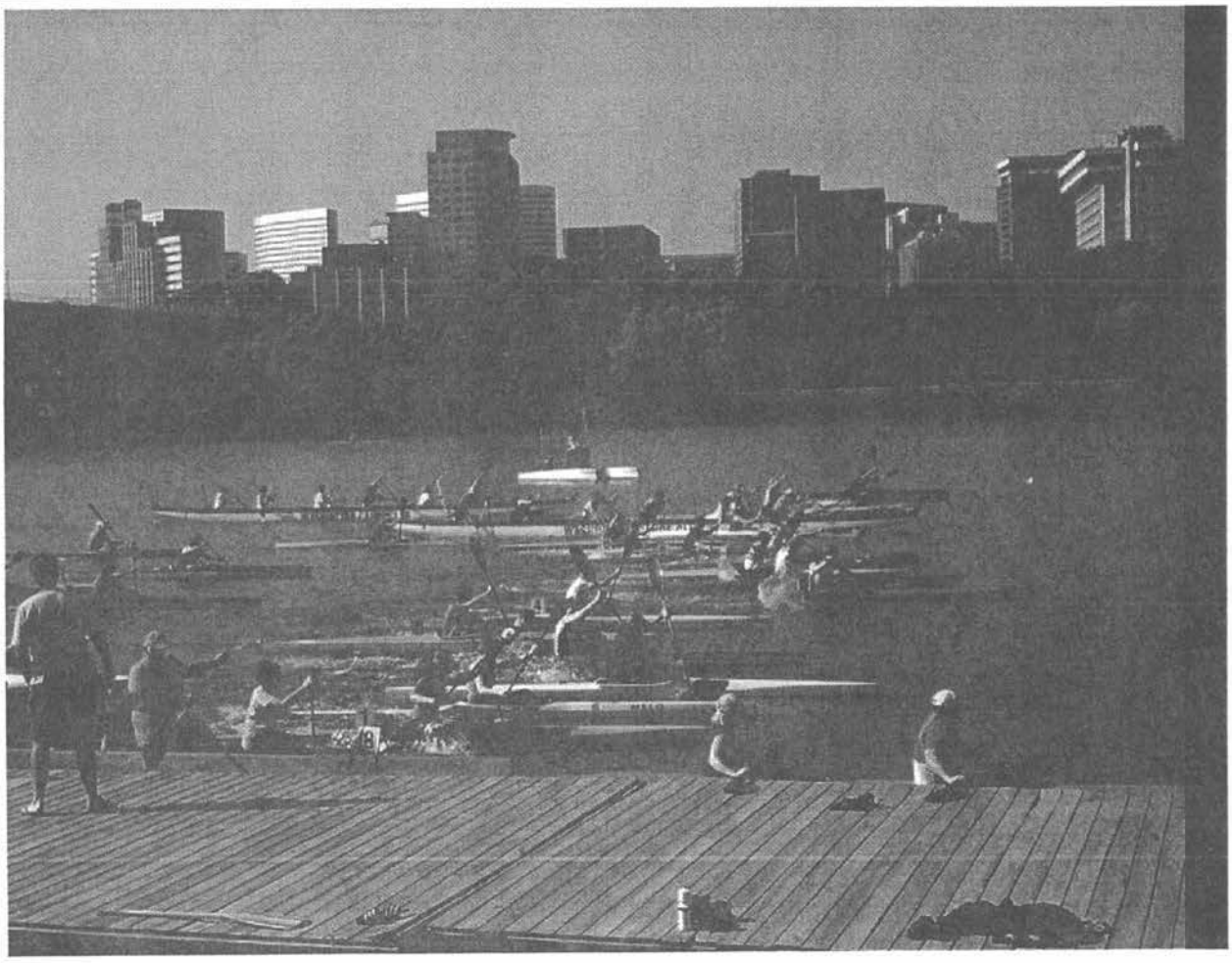
Section 10 of the Rivers and Harbors Act of 1899

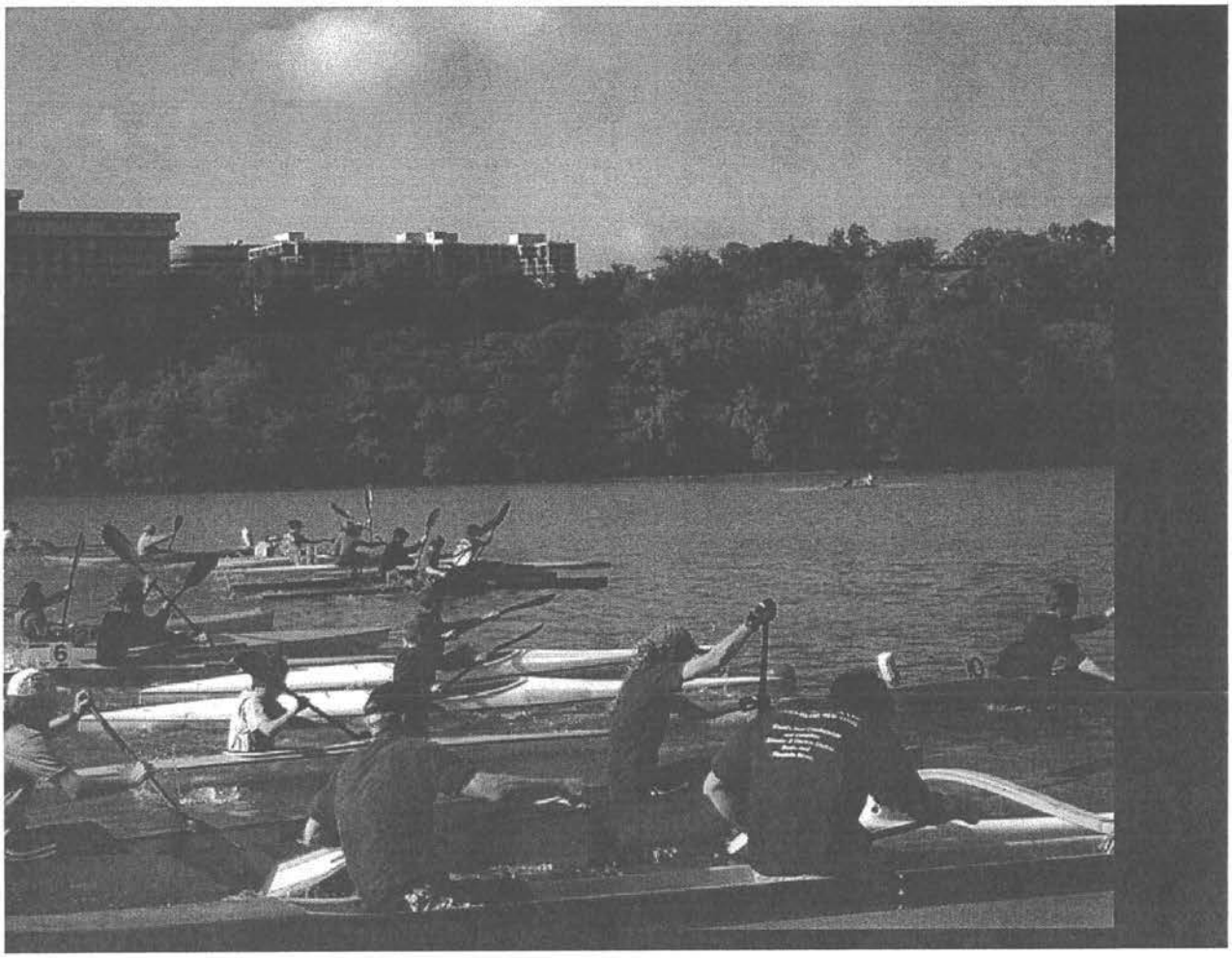
33 U.S.C. 403

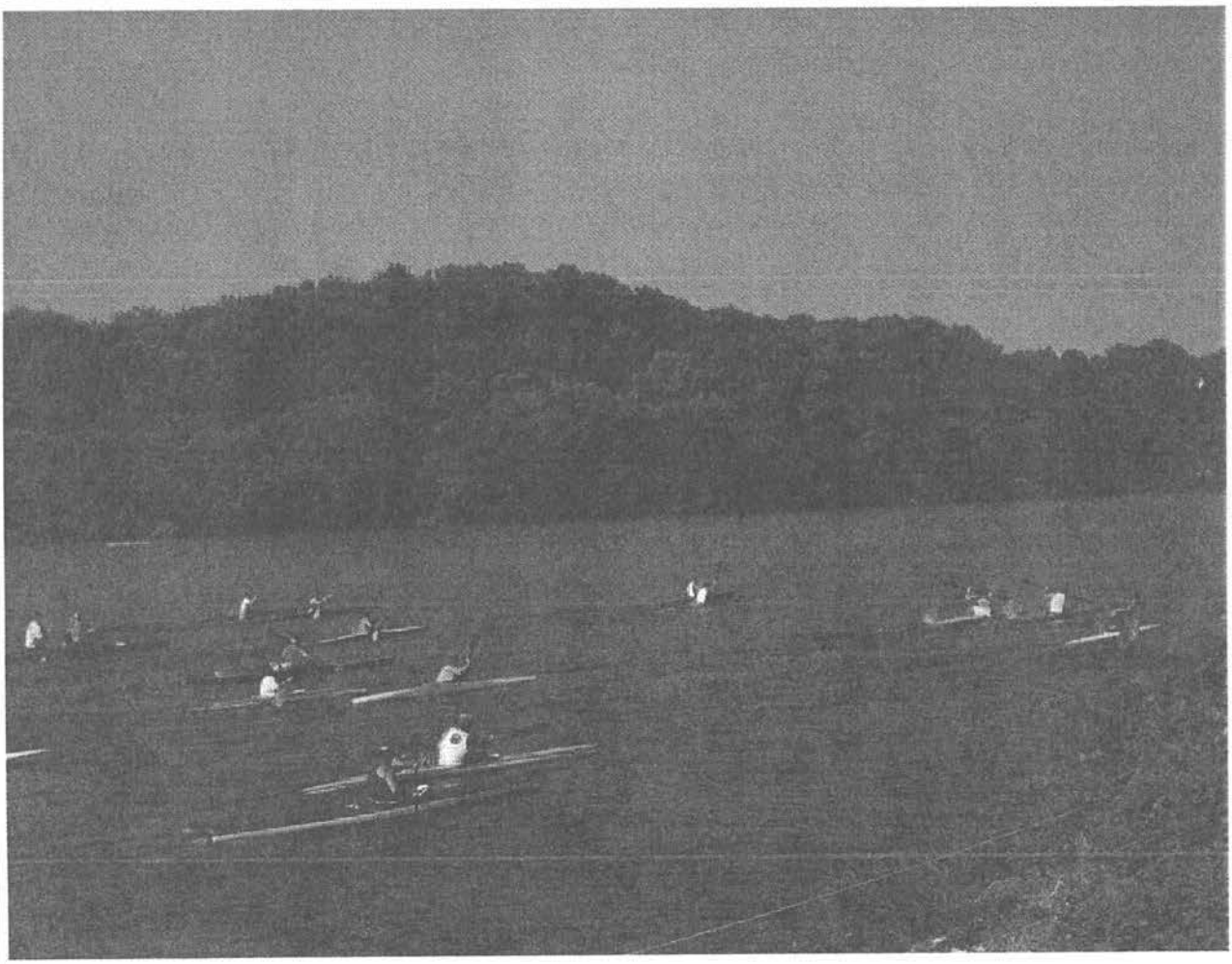
That the creation of any obstruction not affirmatively authorized by Congress, to the navigable capacity of any of the waters of the United State is hereby prohibited; and it shall not be lawful to build or commence the building of any wharf, pier, dolphin, boom, weir, breakwater, bulkhead, jetty, or other structures in any port, roadstead, haven, harbor, canal, navigable river, or other water of the United States, outside established harbor lines, or where no harbor lines have been established, except on plans recommended by the Chief of Engineers and authorized by the Secretary of War; and it shall not be lawful to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor of refuge, or inclosure within the limits of any breakwater, or of the channel of any navigable water of the United States, unless the work has been recommended by the Chief of Engineers and authorized by the Secretary o War prior to beginning the same.

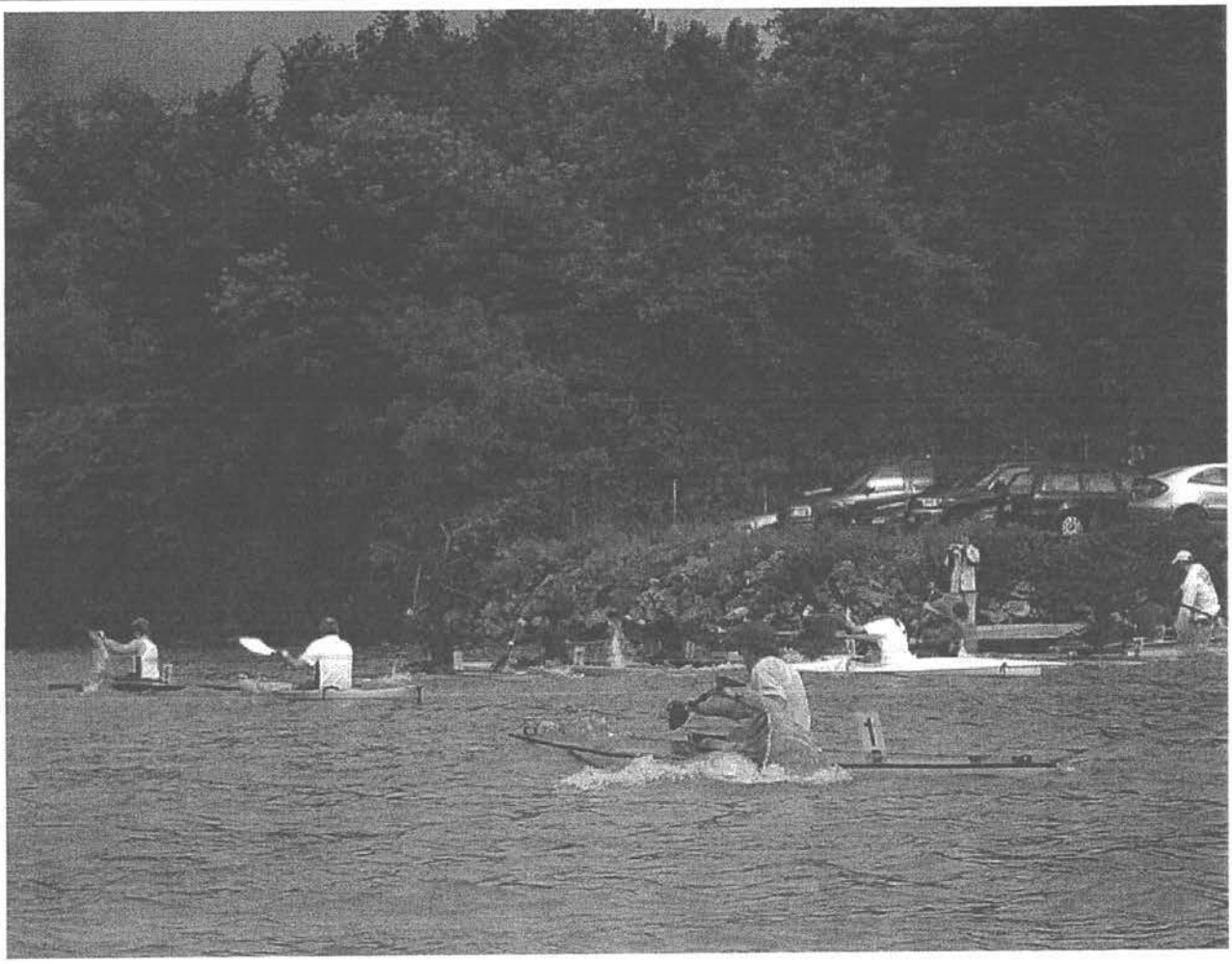
Canoe / Kayak Athletes from the National Capitol area have trained and raced on the same water since the early 1900's

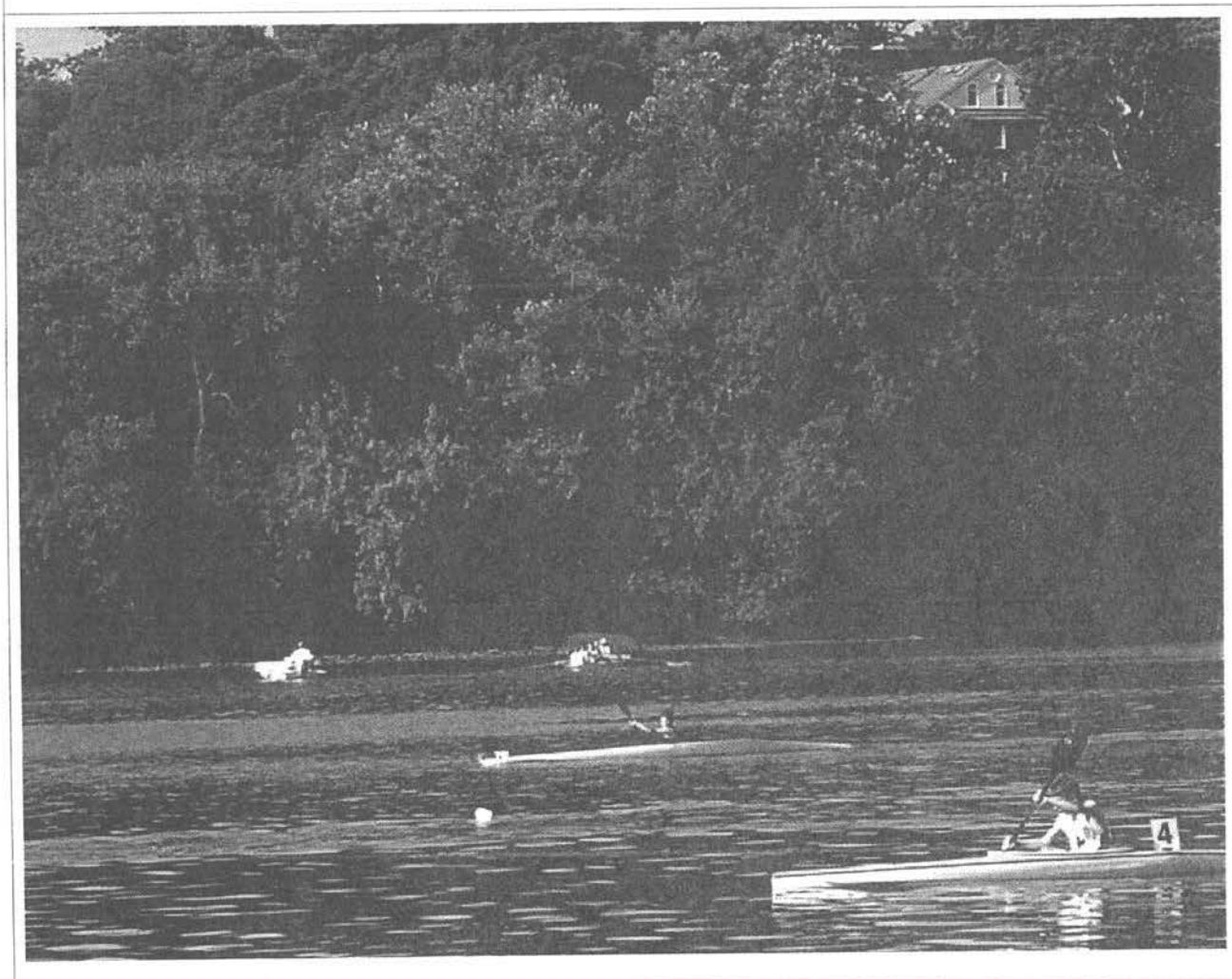


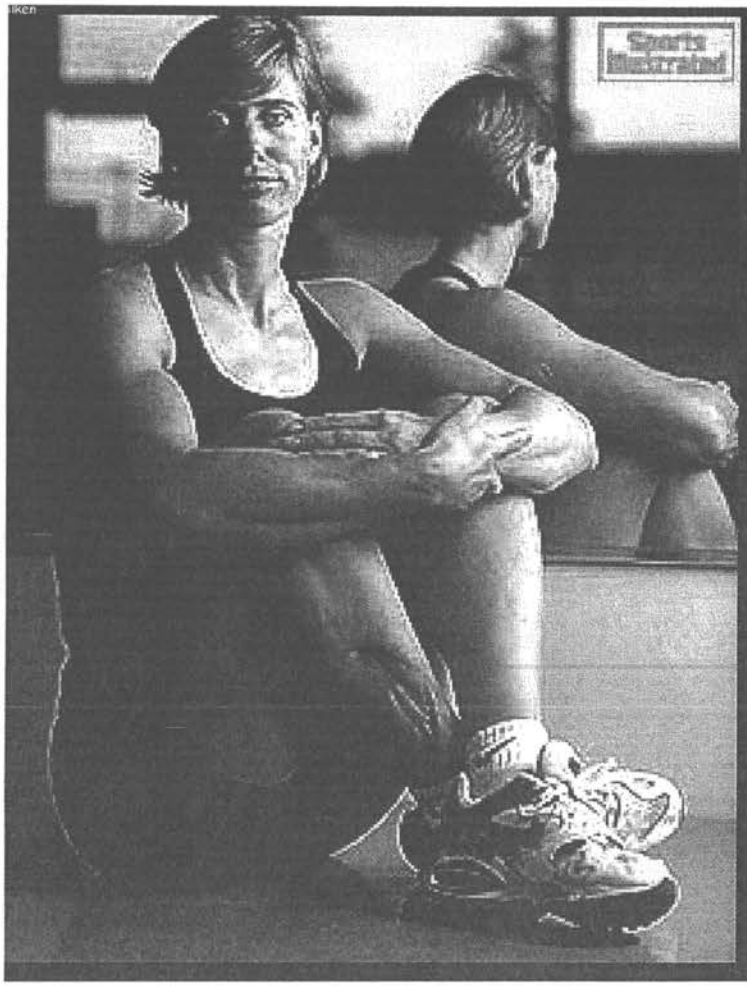









4



"Seventy-eight days before that Olympic final, during warmups for regatta in Essen, Germany, the scull of a coxless German pair's boat cut across Laumann's path. I pointed bow ripped into her lower right leg, shredding nerves, shearing muscles and fracturing th fibula. "Slides from the operating room make it look like a chisel hac gone from the knee inward and a flap of her leg had fallen down," recalls Marilyn Copland, a close friend who changed Laumann's dressing six times a day for five weeks after the surgery."

Rowing Shells can be dangerous

The Potomac River Safety Committee

Http://www.w-lcrew.org/safety/safety.html



Safety Rules & Guidelines

for the

Potomac River

Fletcher's Cove ——— ● ——— National Airport

Contents

Charter & Implementation *5*

Tasks of the Safety Committee shall include: 6
Implementation: 6
Additional and Current information 6

Safety Rules *9*

Map of the Potomac River 8

I. River Traffic Patterns and River Hazards **9**

A. Fletcher's Cove 9
B. Hens and Chickens 9
C. Three Sister's Islands to Key Bridge 9
D. George Washington Race Course- 3 Sisters to Thompson Boat Center 9
E. Theodore Roosevelt Bridge 10
F. T.R. Bridge to Memorial Bridge 10
G. 14th Street Bridges and Below 10
H. Specific River Hazards and the Use of "Little River" 10
Map of the Potomac River 12

II. Rowing Before Sunrise or After Sunset **13**
III. Cold Weather/Winter Rowing **13**
IV. Inclement Weather: **13**
V. Launches & Coaches **14**
VI. Other on the Water: **15**

Contacts *19*

Glossary *21*

Seat Numbering: **21**

Appendix A: Weather Related Health Emergencies *23*

Hypothermia **23**
Early Hypothermia 23
Profound Hypothermia 23
Heat Related Emergencies **23**
Heat Exhaustion 23
Heat Stroke 24

Appendix B: Capsize & Person Overboard Procedures *25*

Appendix C: Charter Members *27*

Think Safety *28*

Charter & Implementation

In the spring of 1998 a safety committee was established with the agreement and cooperation of all major programs that row on the Georgetown section of the upper Potomac River (between Haines point and Fletchers Cove). This was deemed necessary to deal with increasing river traffic caused by the explosive growth in rowing, canoeing and kayaking. The purpose of the committee is to provide the rowing/paddling community with guidelines for safe use of the river, and to provide an avenue for concerns. The committee will do this by supporting enforcement by the Metropolitan Police Department of existing legal requirements for equipment and boat safety through aggressive awareness, educational, and self-help initiatives.

The information found in the following pages has been drafted by the committee with the greatest concern for safety. The guidelines are based on DC Harbor Patrol, U.S. Coast Guard and USRowing guidelines in addition to the extensive experience brought to the committee by it's members. The committee considers safety to be the number one priority of all organizations, coaches, coxswains, and rowers who use the river. It is often easy to underestimate the potential for disaster. This document is meant as a means to educate and provide the tools for safe use of the river. These rules are written for everyone's benefit. Furthermore it is emphasized that all coaches should go over regularly with their crews proper safety procedures and ways to handle emergency situations of all kinds.

All coaches and individual scullers/paddlers are expected to make themselves familiar with the guidelines and work to make sure others are aware of them also. Through out the fall and spring members of the safety committee will be actively reminding users of the river if they are not following the guidelines. Frequent disregard for the rules may prompt the committee to inform the governing authority for the individual, be it a club president, boat house manager, athletic director, or police of the person's actions.

The safety committee shall be composed of representatives of:

Georgetown University Crew

Georgetown Local Organizing Committee (GLOC) (for the NCASRA)

George Washington University Crew

Potomac Boat Club

Thompson Boat Center

Washington Canoe Club

Individuals designated by the current committee as a whole.

Individuals on the committee are volunteers appointed by their respective organizations with extensive experience with boating and/or coaching on the Potomac river in addition to a interest in river safety. The current members of the committee can be found on the Safety Committee web page at http://www.w-lcrew.org/safety/safety.html.

Tasks of the Safety Committee shall include:

Develop and maintain on the water rules and recommendations
To meet a minimum of 3 times per year, prior to each season to review safety issues
To hold fall and spring safety meetings with mandatory attendance by all coaches
Sponsor safe boating and other educational classes
Respond to breaches of rules and other unsafe practices referred to it for action

Implementation:

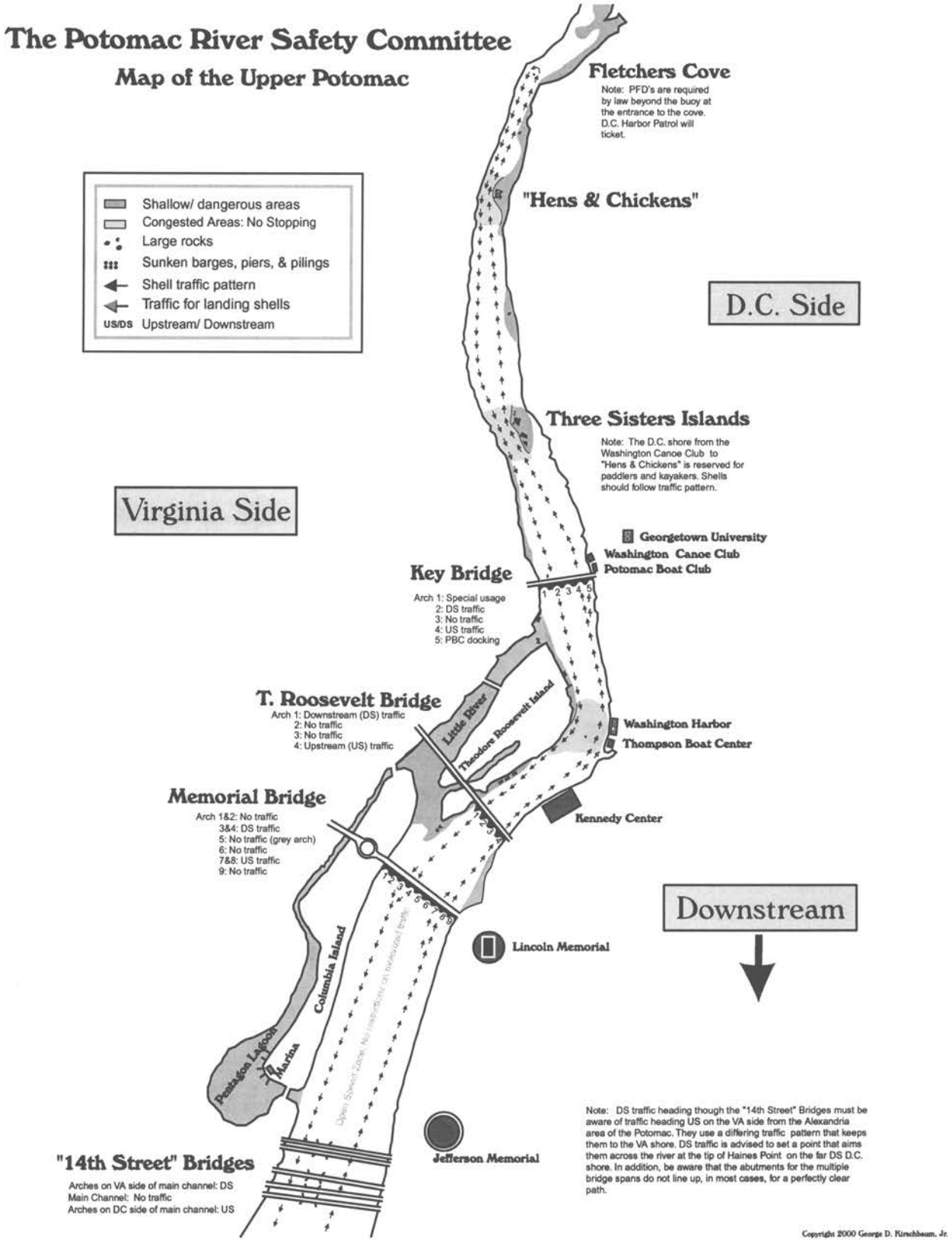
The major programs and organizations shall be responsible for implementation and enforcement of on the water rules issued by the safety committee. Violations should be dealt with within the sanctions available. Recurring incident evidencing blatant disregard of the rules may be referred to the Safety Committee for resolution in accordance with the following procedures:

1. Individuals or organizations not satisfied with resolution of reported violations by individual organizations should refer the matter to the Safety Committee. Referrals should be in writing and should describe the incident in as much detail as possible.
2. The Safety Committee will review the referral as follows:
   A. Review the facts of the incident(s) at issue
   B. Establish the seriousness of the matter against the relevant rule or safety protocol
   C. Determine action to be taken, to include:
      - Dismissal of complaint with reasons
      - Meet with individual or organization who/which is the subject of the complaint
      - Formulate action to be taken with parent organization

The safety committee will make decisions binding on organizations, and/or individuals and be subject to institutional rules with which he/she is affiliated. If sanctions are imposed they could involve the following:

A. Revocation of privileges, e.g. Limitations on use of facility and/or equipment
B. Denial of entry to sponsored regattas

Any questions concerning the committee or issues requiring resolution should be first addressed to the Safety Committee member who represents your governing club. In the event that individual is unavailable, contacting of another committee member is acceptable.



Copyright 2000 George D. Kirschbaum, Jr.

Safety Rules

I. River Traffic Patterns and River Hazards

These are directions for rowers/crews. (Map at end of section) Paddlers and kayakers should contact the Washington Canoe Club Aquatics Committee for guidelines. Users of rental boats should consult the rental agency for information. Notation of river traffic starts at Fletcher's Cove and works progressively downstream. Most information concerns rowing shells. Paddlers are asked to use the river closest to the D.C. shore from Key Bridge to Fletchers Cove and to use the prescribed traffic pattern downstream. For simplicity **US**= ***upstream***, and **DS**= *downstream*.

A. Fletcher's Cove

1. US crews should turn no more than 10-20 strokes above the end of the island on the starboard side (or DC Harbor Police Buoy) that signals the beginning of the cove.
2. Crews should be aware that there are many rock hazards on the DC side of the cove.

B. Hens and Chickens

1. DS Crews must follow the VA shoreline closely at all times. The area is prone to congestion and is narrow.
2. US Crews should follow a near straight line from Three Sisters Islands to the Hens and Chickens.

In the area between the Three Sisters Islands, and the Hens and Chickens, slow moving crews or crews wishing to do drills should slide to the DC side of the river to avoid faster moving traffic going US. However, crews must be aware that the river area 250 meters from the DC shore is used by and the domain of canoes and kayaks.

C. Three Sister's Islands to Key Bridge

1. When passing between the Three Sisters Islands and the VA shore team boats (4's and 8's) should be no more than 3 abreast, smaller boats no more than 4 abreast.
2. **DS** Crews should follow the curve of the VA shore and pick a course through the second arch from starboard of Key Bridge only after passing the Three Sisters Islands.
3. **DS** Exiting Key Bridge, crews should aim for the point of land on Roosevelt Island that is directly opposite Thompson Boat Center at the bend of the river.
4. **US** crews should go through the 2nd arch from DC on Key Bridge and aim for the Three Sisters Island that sits farthest towards the VA shore. The 1st arch of Key Bridge on the D.C. side is reserved for Potomac Boat Club crews who are landing.
5. **US** After passing through Key Bridge, crews should pick a point just to the port side of the Three Sisters Islands. Crews should work together so that they may pass the islands as closely as possible and still remain out of the path of crews headed downstream.

D. George Washington Race Course- 3 Sisters to Thompson Boat Center

When the GW Race course is in place during the mid to late spring, the following rules apply during non-regatta days.

1. **DS** Crews should use lanes 2-4 (lane 4 is closest to VA shore) only! No crew heading DS should use lane 1. US crews should stay off the course except when passing around the Three Sisters Islands.
2. Slow moving crews using the course above Key Bridge should give way to faster crews. No crew should stop and impede traffic while on the course.
3. Crews should leave the course and take a standard course on the river once they have reached the upstream end of the "Crew Wall" (where crews have their team color painted).

E. Theodore Roosevelt Bridge

1. **DS** Use the 1st arch directly next to Roosevelt Island.
2. **US** Use arch number 1 or 2 from DC shore. 1 primarily for crews returning to Thompson Boat Center.

- once crews enter the bridge they should take course that points them on the "white tower" visible in the Washington Harbor complex.

- Once at the bend of the river crews should point on the "slanting" building visible in Georgetown and then align themselves to go through the 2nd arch of Key Bridge.

F. T.R. Bridge to Memorial Bridge

1. **DS** Use arch 1 arch to the right of dark gray center arch.
2. **US** Use the 2nd Arch from the DC shore.

G. 14th Street Bridges and Below

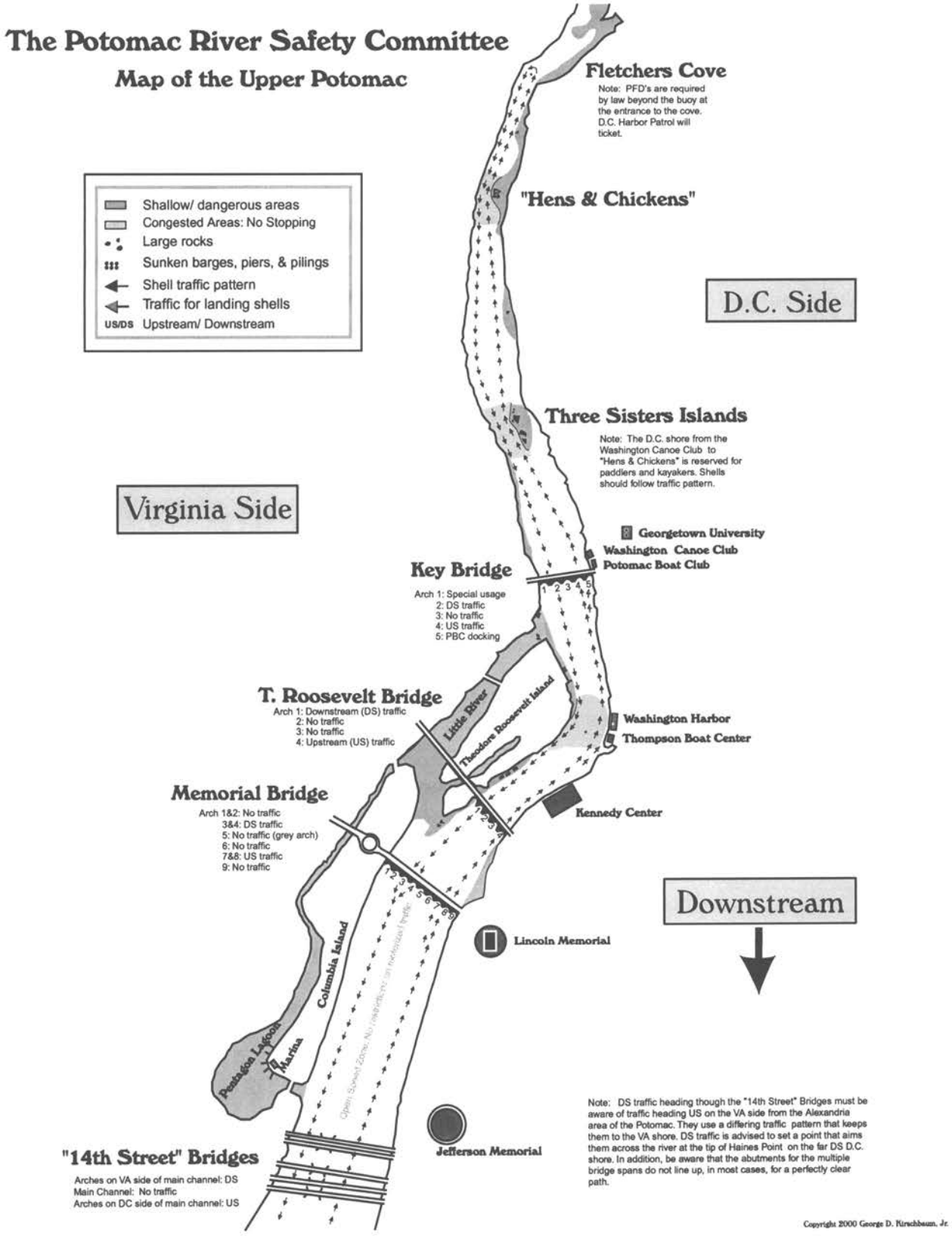
1. **DS** Use the arch to the right of the Channel Arch (the one with lights and wood buttressing).
2. Once through the bridges crews should aim for Haines Point (on the DC shore). However, crews travelling upstream have the right of way.
3. **US** Crews should follow the seawall on the DC shore and pick a line through the bridges that will line them up with the 2nd arch on Memorial Bridge.

H. Specific River Hazards and the Use of "Little River"

1. The DC side of Fletcher's Cove is very rocky.
2. There are several rocks about 200 meters before the island that forms the entrance to Fletcher's Cove.
3. There are many sunken rocks around Hens & Chickens that are visible only at different tides. No crews should ever go to the DC side of these islands!
4. **US** There is a rock on the DC (20 meters) shore approximately 500 meters from Hens & Chickens. It is some times marked with a white buoy.
5. At the Three Sisters Islands there are several rocks that sit just below the surface. One sits on the VA side directly next to the most upstream island. Upstream of the main islands there are several large rocks that are almost never visible. One is often marked by a white, round floating buoy. There are several rocks adjacent to this one. Crews should move a minimum of 25 strokes past this area before cutting in to the DC shore (as warranted) when heading **US**. Often at low tide there are mud flats around the islands.

- No crew should ever go between the DC shore and the islands! The water is shallow and navigable only by canoe or kayak.

6. There are mud flats with rocks that appear at low tide located on the VA shore just upstream of Key Bridge.
7. There are several submerged rocks and pipes near a rocky outcrop on Roosevelt Island across from Wisconsin Avenue in Georgetown.
8. There is a sunken canal barge approximately 250 meters above Theodore Roosevelt Bridge next to Roosevelt Island. The entire T.R. Island shoreline is full of debris. Crews should stay around 50 meters off shore.
9. DS of T.R. Island is a mud flat at low tide that also contains several hidden rocks.
10. The DC shore between T.R. Bridge and Memorial Bridge (in front of the Lincoln Memorial Stairs) is often full of snags and debris.
11. The area between the VA shore and T.R. Island known as "Little River" is very shallow and contains numerous rocks. Rowing in this area is discouraged.



Copyright 2000 George D. Kirschbaum, Jr.

II. Rowing Before Sunrise or After Sunset

Rowing before sunrise or after sunset, when visibility is poor and light levels are low, lighting for all boats is required by law Each individual shell and launch is required to have it's own light.This includes coaches launches, racing shells of all sizes, canoes, kayaks, and dragon boats. Lights must be visible when viewed from the bow or stern. A bright red or white light are acceptable. It is recommended that two lights, for bow and stern, be used. Using two lights increases visibility, allowing a user to be seen from all directions. Care should be taken that lights are not obscured by the physical structure of the boat in question or clothing worn by the operator.

In addition, coxswains, and a member of straight (non-coxed) crew should carry a whistle or other noise maker for audible warnings. Whistles should be used to alert others of imminent danger, or collision.

III. Cold Weather/Winter Rowing

Rowing when the water temperature falls below 50 should be done with great consideration. Hypothermia is a swift and incapacitating killer that strikes when the combination of cold weather and moisture work to decrease body temperature. It can take mere minutes before a full size adult is incapable of helping themselves once hypothermia has set in. Keep in mind that you don't have to fall in the water to get hypothermia! Cold air temperatures and any moisture on the body (from being splashed, rain, sleet, snow) can lead to hypothermia (see Appendix A). The following measures are suggested when working out on the water in cold weather:

1. Sign out in a log book or let others know you will be on the river and when
2. Four Oar Rule- the boat must have a minimum of 4 oars on the water, or
3. Buddy System- if individuals go out they should do so in pairs.
4. Wear inflatable, compact, life vest or wet suit.
5. Stay closer to shore
6. A noise maker of some kind should be carried in each shell and be attatched in some manner so as not to be lost if the shell capsizes.

However, the only true safety device or practice other than common sense is a support/coaching launch. In the event of an emergency a well-prepared safety launch can assist the individuals in question and transport them to safety. Even then hypothermia is an issue. All individuals should ask themselves before launching if being on the water is the best and only way to train. See Appendix A for information on Hypothermia and other weather related emergencies.

IV. Inclement Weather:

Coaches should use common sense in the face of inclement weather. Fast currents, high winds, large or heavy amounts of debris, extreme temperatures, lightning storms and fog are all reasons for not practicing on the water. Crews should not launch if such conditions exist or are seriously threatening.. It is highly advised that coaches and scullers listen closely to NOAA weather channels routinely.

Wind- Coaches and rowers should keep in mind that often times it is easy to launch from the dock but much harder to land in windy conditions. This is especially true with novices and small boats. Waves or swells generated by strong winds can quickly swamp a crew. This is especially true in wide parts of the river (i.e. between Memorial Bridge and the 14th Street Bridge or the area just downstream of TBC).

Heavy Rains & Fast Currents- After heavy periods of rain currents can increase in speed and strength quickly. The river usually will rise over a period of 1-3 days after the cessation of precipitation and recede in about the same amount of time barring after the peak barring further rain. At these times extreme caution should be taken. Areas for special consideration are around and upstream of the Three Sisters Islands with increasing seriousness as one approaches and passes the Hens and Chicken islands (see river traffic map). It is strongly advised that novice crews be kept below the Hens and Chickens during these times. In all cases the currents can be quite swift and unpredictable due to the depth an topography of the river bottom. Special attention should also be paid to all bridge arches as currents are accelerated as they pass through them. Lastly with heavy rains and currents on the Potomac come heavy debris in the form of large logs, tires, and water logged farm animals.

Lightning Storms- Very dangerous. Crews should return immediately to the dock, or proceed immediately to shore if the boat house is too distant. There does not have to be rain or thunder to have lightning. If the sky begins to look bad, it probably is.

Fog- Obviously limits visibility, but also mutes sounds. If caught in fog it is recommended that crews proceed with extreme caution and appropriately slower speeds in the direction of the boat house. If the fog is too extreme it may be better to sit still. Be sure to make some noise so that others on the river can be alerted to your presence. Fog is often times thicker upstream of Key Bridge. Do not assume fog that appears to be thinning will continue to do so!

V. Launches & Coaches

It is important to have a well equipped and working safety launch whenever working with crews, especially high school and college squads. Coaches should have the necessary training and be certified in first-aid and CPR. Coaches should work to minimize potential accidents and should work in a responsible and prudent fashion.

1. It is the responsibility of *any* coach boat to provide assistance to *any* capsized boat, evein if from another sport, or a pleasure boat. Coaches are reminded to stop at a safe distance and offer assistance. Approach with caution and in a controlled manner. *Be aware of your prop*!

2. Coaches should make sure that for each rower of coxswain that they have on hand a record of the following:
   - Name and date of birth
   - Address
   - Name and phone number for a relative or other emergency contact
   - Height, weight, list of allergies and other important medical information
   - Name of medical insurance provider, and pertinent insurance information

3. No safety launch, no row! No high school or college crew should be on the water with out a safety launch close by. A coach sitting in the coxswain's seat does not count as a safety launch!

4. Occupants of a coaches' launch should be kept to a minimum. One or two extra people in addition to one coach should be the maximum for a safety launch (14'). Preferably launches should be large enough to hold all members of a given crew in the event of an emergency. 16' foot launches are suggested. "V-hull," or skiff style (Carolina Skiff) are recommended. Aluminum "john boats" are not recommended because of their instability with several passengers and less than stellar poor weather performance.

5. The coach should be wearing a life jacket or PFD at all times while on the water. In addition each launch should have the following safety items:
   - Life jacket for each person in the launch
   - PFD/Life jacket for each member of a crew on the water.
   - A megaphone (powered or cheerleader type)
   - Emergency Space blankets for each member of a crew on the water
   - Signalling device (flares or horn)
   - Paddle
   - Tools
   - Water bailer
   - 50ft. Safety line.
   - Fire extinguisher

6. Operators of launches should have a uninterrupted 360 view at all times. Use of heavy ballast in the bow of the launch (log, tire with rim, cinder blocks, passenger, etc) can be used to trim the launch so it rides level. Aftermarket outboard motor accessories such as Dole Fins also work well for this purpose. See the section on rowing Before Sunrise/After Sunset for more visibility issues.
7. Coaches need to be aware of the wake their launch throws. Coaches should do their best to minimize wakes when passing other crews when at all possible. At no time should a launch's wake be allowed to swamp or endanger a shell/canoe/kayak. If a launch needs to pass or maneuver around a crew the coach should clearly communicate his/her intentions.

8. There should be a minimum of one coaches' launch for every 3 8's in a given practice.

9. Each launch should be marked with the name of the owner/organization.

VI. Other on the Water:

The following are suggestions that should be referenced with all of the above stated material. These suggestion would help to increase safety and organization on the water so that all users of the river will know what to expect of each other.

1. All shells should be equipped with emergency, quick releases for foot stretchers. This includes heel tie-downs and quick release laces/velcro closures.

2. Coaches are advised to purchase a copy of USRowing's Safety Video, show it, and go over it each year with all rowers. In addition it is advised that the coaches go over emergency procedures with their rowers each season.

3. Each boat (coach or athlete) has the responsibility for watching where it is going and for avoiding collisions. Boat's without cox must be aware!

.4. Once crews have been launched they should row to and wait at a spot specified by the coach that is no more than 500m away from the dock. High school and college crew should not warm-up or row with out a coaches supervision!
- A common place for crews launching from TBC to stop and wait is the "crew wall" where crews have their colors painted around Wisconsin Avenue in Georgetown.
- Going downstream crews should wait upstream of Theodore Roosevelt Bridge.

5. Coaches should avoid taking out crews of differing speeds and skill levels. Having several crews spread over 1000-2000m or more may as well not have a coaches safety launch with them. Furthermore the coach can not adequately supervise or coach crews in this fashion.

6. Likewise to number 2 above, coaches should keep all crews at "racing distance" apart. That is the distance (width) between two crews. Coaches should limit the distance across all crews in a practice to 3 abreast.

7. Coaches must keep their crews on the right side of the river at all times! Please refer to the information concerning traffic patterns for the river.

8. Slow moving crews should yield to faster crews by shifting their course further to the right and allowing the over taking crew to pass. Larger shells have right away over smaller shells due to their decreased maneuverability.

9. Coaches who wish to stop and work with crews should do so only in areas where they are not impeding the the flow of traffics. Please refer to the River Traffic Patterns section.

10. Boats should not turn upstream from bridges unless they are at least 500m from the bridge. Swift currents can pull shells into bridge abutments very quickly!

11. Boats wishing to turn should make sure that no other crew is approaching first. Do not cut in front of oncoming crews! Furthermore, crews should make sure to complete their turn only after moving to the other side of the river first, before proceeding in the opposite direction.

12. Crews that are landing on the dock have priority over crews wishing to launch. This is especially true in inclement weather.

13. Landing shells should use all available dock space; they should not wait for the very end of the dock to become open if there is space further up the dock. Crews should endeavor to walk their

boat up so that other crews can land unless asked by a coach not to (i.e. another boat is going around them to fill open dock space above them).

14. All boats should take not more than one minute on the dock once the boat has either been placed in the water or has returned from a row. If the boat has serious equipment problems or missing rowers, the shell should be removed from the water. Novice crews are allowed some leeway but should be taught how to function quickly on the dock. Boat and oars come before shoes!