Public Recreation on Virginia's Inland Streams: Legal Rights and Landowners' Perceptions

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# TABLE OF CONTENTS

Abstract ........................................................................................................... 1

Acknowledgments .......................................................................................... 2

PART I: Legal Rights ....................................................................................... 3

Introduction ....................................................................................................... 5

Specific Declarations of Public Recreational Rights ................................... 9

I. Statutory Provisions .................................................................................... 9
II. Virginia Supreme Court Actions: *Boerner v. McCallister* .................. 12
III. Virginia Commission of Game and Inland Fisheries' List of Public Streams ................................................................. 14

The Navigability Issue .................................................................................... 17

I. Definition of "Navigable" ............................................................................ 17
   A. Federal Commerce Clause Navigability ............................................. 17
   B. Title Navigability .............................................................................. 19
   C. Recreational Navigability ............................................................... 20
II. Specific Determinations of Navigability in Virginia ............................... 21
   A. Virginia General Assembly Actions Regarding Navigable Waters .................. 21
      Statutes Applicable to Individual Streams ....................................... 21
      General Statutes Protecting Navigability ........................................ 25
   B. Navigability Determinations by the Virginia Supreme Court .......... 27
   C. Federal Determinations of Navigability Affecting Individual Streams in Virginia ................................................................. 29
III. What Does "Navigation" Include? ............................................................. 31

The Streambed Ownership Issue ................................................................... 37

I. Federal-State Relations ............................................................................. 37
II. Impact of English and State Land Grants to Individuals ....................... 38

Other Factors Affecting Public Rights ......................................................... 53

I. Effect of Established Public Use ............................................................... 53
LIST OF TABLES

1. Virginia Commission of Game and Inland Fisheries' Tentative List of Public Streams of Virginia .................15

2. Sample Streams and Mileage Included .....................72
ABSTRACT

The increasing public demand for water-based recreation on Virginia's inland streams has given rise to substantial conflict between the public and riparian landowners. The relative rights of these two groups have not been fully defined by the law of the Commonwealth. Except for action by the General Assembly in 1780 and 1802, reserving public rights in streams whose beds previously had not been granted to private individuals, the legislature has been silent with respect to recreational rights. The issue has been before the Virginia Supreme Court on only one occasion, and this case left many significant questions unresolved. However, analysis of other decisions of the Virginia court concerning the public right of navigation and the ownership of lands beneath the waters of streams allows tentative conclusions to be reached regarding public recreational rights. It appears that, in general, streams suitable for commercial navigation have publicly owned beds and are open to public use. The public generally has no recreational right in streams not navigable by the commercial-use test unless reserved in state ownership by the 1780 and 1802 statutes. But official navigability determinations have not been made for many of the state's streams, with the result that uncertainty continues to exist in many individual cases. In this type of situation, resolution of a conflict regarding public rights may require a judicial proceedings in which the court considers such factors as past commercial use and possible General Assembly enactments relative to the stream's navigability in determining its classification as either public or private.

A survey of riparian landowners' perceptions regarding public recreational use of streams provides insight into the public-use issue. The survey involved a sample of 995 riparian landowners, 701 of which participated by completing a questionnaire. The survey results indicate that problems caused by stream recreationists are of relatively low magnitude and that the attitude toward recreational use is generally positive. However, the survey did not reveal a generally acceptable mechanism for protecting scenic river resources and increasing public use. Essentially equal degrees of disinterest were indicated with regard to four alternative approaches suggested.

Key Words: Recreation, Public Rights, Canoeing, Fishing, Water Law, Public Access, Navigability, Streambed Ownership, Riparian Rights, Landowner Attitudes, Property Rights, Scenic Rivers
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PART I:
Legal Rights
INTRODUCTION

Interest in the use of water for recreational purposes and aesthetic enjoyment has expanded substantially in recent years. There are various reasons for this increase, but a key factor has been the heightened level of environmental consciousness. This expanded environmental awareness has resulted in renewed interest in outdoor activities based on appreciation of natural environments, particularly natural bodies of water. This increase in water-related activities such as canoeing leads to increased conflict between the public and the owners of property that borders or, in some cases, underlies bodies of water. This conflict is an inevitable result of the fact that most waterfront property is privately owned. In many cases, exclusive use of adjoining water is considered to be a major reason for ownership of such property. Thus, the issue of public recreational use is a major water management issue.

In addition to the general growth of interest in water recreation, several specific developments during recent years have created a heightened level of interest in public rights to use Virginia streams. One significant reason for this greater interest is the establishment of a state scenic rivers program\(^1\) to protect certain streams from development, particularly dam construction. To date, seven stream sections have been designated by the state legislature as components of the state scenic rivers system, including a 26-mile segment of the Rivanna River in Fluvanna County;\(^2\) a 28-mile section of Goose Creek\(^3\) and a 16-mile stretch of Catoctin Creek in Loudoun County;\(^4\) a 5-mile segment of the Appomattox River in Dinwiddie and Chesterfield counties and the City of Petersburg;\(^5\) a 10.8-mile section of the Roanoke River (also referred to as the Staunton River) in Campbell and Halifax counties;\(^6\) a 33-mile section of the Nottoway River in Sussex County;\(^7\) and a 14-mile section of the Shenandoah River in Clarke County.\(^8\) In addition, a 6-mile section of the St. Mary’s River on National Forest land in Augusta County has been recognized by the General Assembly as a scenic river resource in a resolution\(^9\) requesting the U.S. Forest Service to cooperate in protection of the stream.

However, several streams recommended for designation by the Virginia Commission of Outdoor Recreation on the basis of special studies have not been incorporated into the scenic river system. A significant factor in these unsuccessful cases has been local opposition arising from concern over such issues as possible restrictions on land use and property
damage from increased recreational activity.\textsuperscript{10} Thus, the program has produced considerable controversy and has increased interest in the issue of public rights.

A second development responsible for increased interest in public recreational rights among Virginians is the construction of the Gathright Project on the Jackson River above Covington. This U.S. Army Corps of Engineers project has been designed to create a cold water fishery downstream of the dam as a mitigation measure for upstream fish and wildlife losses caused by construction of the reservoir. These losses have been a controversial aspect of the project since the area to be inundated was a state wildlife management area noted for its trout fishery and populations of deer and turkey. But the downstream fishery is not without its opponents; the area in question traditionally has been considered to be private. Thus, development and utilization of the downstream fishery presents a potentially significant conflict between the public and riparian landowners.

The right of the public to use any particular body of water for recreational purposes involves two distinct issues: (1) getting to the shore of the water body; and (2) actual use of the water for such purposes as boating or fishing. These rights can exist independently of each other. A public highway may provide access to a stream, but the right to float downstream through private property may not exist. On the other hand, the right to float may exist, but access to the stream may be unavailable. Thus, both aspects of the issue are fundamental to the public right.

There is a basic difference in the nature of these two aspects of the public rights issue. Regarding the issue of getting to the water, there is little question in the general case that a landowner can prohibit the public from crossing private property to gain access to water. Establishment of this public right generally requires public acquisition of land. On the other hand, public rights to use a body of water once access is accomplished are affected by the fact that water is a special resource subject to both private and public rights. However, the location of the dividing line between these public and private rights is not clearly defined and is the source of considerable controversy.

This report focuses on this latter issue: the extent of the public recreational right in relation to that of the riparian landowner. The issues associated with getting to the water are a separate matter not addressed here.
The scope of the work is limited further to Virginia's inland streams and gives only peripheral treatment to lakes and tidal waters. Thus, the basic question addressed is the right of the public to boat and fish in Virginia's freshwater streams.

The general issue to be explored involves a variety of questions that can arise under specific circumstances. Who owns the beds of streams in Virginia? Can a fisherman wade on a streambed provided he can gain access to the water without trespassing on land outside the stream channel? What impact does bed ownership have on public rights of canoeing or other pleasure boating? Does the right to float include the right to fish? Can a canoeist make use of the streambank? Does the fact that the state stocks portions of a stream with trout or other fish create a public right of use? These and other questions that can be raised indicate that the public rights issue is more than a simple positive or negative determination; it is a complex series of questions that potentially can be answered in various combinations to give a range of outcomes.

Public rights are largely defined by state law; therefore, such rights vary among the states. Some of the states take a restrictive position with respect to public rights, with the result that private rights of riparian landowners are emphasized. In this situation, public recreational rights may not be recognized in a large number of streams. At the other extreme, some states recognize broad public rights, thereby restricting riparian landowner interests. Under this condition, most streams suitable for recreation are available for public use.

The law of the Commonwealth of Virginia with regard to public recreational rights has not been fully developed. Statutory treatment has been limited, and the issue has been directly considered by the Virginia Supreme Court in just one case. However, legal issues closely related to the public rights question have seen additional development by the courts and state legislature. Therefore, certain inferences can be drawn that extend the direct legal declarations of public rights and indicate potential directions that this law may take upon further development.

The approach to be taken in analyzing the existing legal framework of the public rights issue is to consider first the specific declarations of such rights. Then consideration will be given to other provisions of Virginia law relative to two underlying issues directly related to public rights: navigability and bed ownership. These two factors are not independent;
the navigability of a stream is one of the factors that determines the ownership of its bed. In the usual case, the beds of navigable streams are publicly owned, with the right of public use well-established, while the beds of non-navigable streams are the property of adjacent landowners, with all recreational rights vested in those landowners. However, a complication in the application of this rule arises because of the fact that bed ownership on Virginia streams is based on other considerations in addition to the navigability issue—for example, special statutory enactments. Due to the existence of these other factors, it is possible for certain navigable waters to have privately owned beds while certain non-navigable waters may have publicly owned beds.

The relationship between the navigability and bed ownership issues makes it difficult to rank them as to their significance, but either one can become the dominant factor under specific circumstances. Wherever public proprietorship of the bed can be established, public rights will exist independently of the stream's navigability. But navigability affects bed ownership and is therefore an indirect factor. If the bed of a given stream is determined to be privately owned for whatever reason, the navigability issue is a more direct factor since any public right of use that exists must be based on the right of navigation. Therefore, both the navigability and bed ownership issues are basic to the overall evaluation of the public rights question.

After consideration of the navigability and bed ownership issues, attention will be given to other factors having potential impact on public rights. One of the principal issues in this regard is the effect of well-established public use on legal rights. A second consideration is the effect of public actions, such as fish-stocking, on public rights.
SPECIFIC DECLARATIONS OF PUBLIC RECREATIONAL RIGHTS

Public recreational rights have been the subject of three types of explicit declarations: (1) statutory enactments, (2) one decision by the Virginia Supreme Court, and (3) an administrative determination by the Virginia Commission of Game and Inland Fisheries.

I. Statutory Provisions

The most direct declaration of public recreational rights in Virginia’s waters is a provision that serves to protect the rights of “fishing and fowling” by reserving ungranted streambeds in public ownership. The legislation\textsuperscript{11} provides that:

All the beds of the bays, rivers, creeks and the shores of the sea within the jurisdiction of this Commonwealth, and not conveyed by special grant or compact according to law, shall continue and remain the property of the Commonwealth of Virginia, and may be used as a common by all the people of the State for the purpose of fishing and fowling....

In order to evaluate the effect of this provision, it is necessary to consider its origin and subsequent evolution.

One of the earliest statutory references to property rights in relation to submerged lands is the following provision\textsuperscript{12} dated April 1679:

Robert Liny haveing complained to this grand assembly, that whereas he had cleared affishing place in the river against his owne land to his greate cost and charge supposing the right thereof in himselfe by virtue of his patents, yett nevertheless severall persons have frequently obstructed him in his just privilege of ffishing there, and in despight of him came upon his land and hale their sceanes on shore to his greate prejudice, aleadging that the water was the kings majesties, and not by him granted away in any pattent, and therefore equally free to all his majesties subjects to ffish in and hale their sceans on shoare, and praying for releife therein by a declaratory order of this grand assembly; \textit{it is ordered and declared by this grand assembly} that every mans right by virtue of his pattent extends into the rivers or creekes
soe farre as low water marke, and it is a priviledge granted to him in and by his pattent, and that therefore noe person ought to come and ffish there above low water marke or hale their scenees on shoare (without leave first obtained) under the hazard of committing a trespasse, for which he is sueable in law.

This provision was enacted as a restriction on public rights since it made entry above low water mark unlawful, but implicit in the restriction was recognition of public ownership beyond low water mark.

The first specific reservation of public ownership of streambeds appeared in a 1780 act providing as follows:

Be it enacted: That all unappropriated lands on the bay of Chesapeake, on the seashore, or on the shores of any river or creek in the eastern parts of this commonwealth, which have remained ungranted by the former government, and which have been used as common to all the good people thereof, shall be and the same are hereby excepted out of the said recited act [for land grants] and no grant issued by the register of the land office for the same, either in consequence of any survey already made of which may hereafter be made, shall be valid or effectual in law, to pass any estate or interest therein.

The 1780 act originally applied only to streams "in the eastern parts of this commonwealth," a term that was not defined. Due to the fact that the state extended beyond its present western boundary at the time of the passage of this act, determining the limits of the "eastern parts" of the state for purposes of the statute poses some difficulty. One conclusion concerning the dividing line between the eastern and western parts of the state is presented by Alvin T. Embrey in his book, Waters of the State. Embrey concludes that the dividing line is the crest of the Alleghenies dividing the waters flowing westward to the Ohio and Mississippi from those flowing eastward to the Chesapeake Bay and the Atlantic Ocean. Under this interpretation, most of the land currently within state boundaries would have been subject to the 1780 act since most of the area drains into the Atlantic, including large areas west of the Blue Ridge. Only the New River Basin and the area to its west would be classified as "western" parts of the state. Regardless of the location of this line defining the applicability of the 1780 act, its effect was extended to the remainder of the state in 1802.
The separate acts applicable to the eastern and western portions of the state were consolidated into the following single provision\(^{17}\) in 1818:

\[
\ldots \text{all unappropriated lands on the bay of Chesapeake, on the sea shore, or on the shores of any river or creek, and the bed of any river or creek in this Commonwealth, which has remained ungranted by the former government, and which have been used as a common to all the good people thereof, shall be and the same are hereby excepted out of this act [providing for private land grants].}
\]

The only major change in this 1818 provision to the present has been the deletion of the qualification that to be reserved, lands must have been used as a common. This deletion did not occur until publication of the \textit{Code of 1873}.\(^{18}\) The existence of this condition in legislation prior to 1873 indicates that streambeds may have continued to pass into private ownership after the statute was enacted in locations where public use had not been established. After 1873, the statute appears to have provided blanket authority for retaining in public ownership all streambeds on previously ungranted land.

Even if the 1780 and 1802 dates of enactment of the statute are considered to be its effective dates, the impact of the statute as a mechanism for preserving public ownership is questionable due to the early dates at which much of the land in Virginia passed into private ownership. Information concerning the amount of land transferred to private ownership after enactment of the statute is not readily available. Maps locating original land grants have not been prepared. The individual grants are recorded, but the large number of such grants and their often somewhat vague descriptions would make analysis on a statewide basis a monumental undertaking.

Although land grant information has not been systematically analyzed on a statewide basis, a sample of such data is given by information compiled by the U.S. Forest Service while in the process of acquiring land that ultimately was incorporated into the national forest system in Virginia. One area encompassed by the Forest Service data consists of land lying along Craig Creek in Botetourt County. Along an approximately five-mile section of the stream from its mouth to a point about two miles southwest of the mouth of Roaring Run, 18 grants of riparian land were made. The earliest was dated 1742, and the latest was recorded in 1846.
Ten of these grants preceded the 1802 statutory date. Another example includes about 3½ miles of the James River from one mile south of Snowden to the point where the Blue Ridge Parkway crosses the river. In this case, 11 of 14 grants were prior to 1802.

These examples indicate that substantial portions of the state’s riparian land may have been granted prior to the statutory dates. The existence of numerous grants of small size and varying dates also poses the potential problem of lack of continuity of stream sections that are public. A situation where small public stream sections are interspersed with private sections may be almost as limiting to public recreational use as total private ownership.

In attempting to evaluate the significance of this statute with regard to any particular piece of property, the question of who has the burden of proving the date of the original grant becomes important due to the difficulties associated with title searches. With regard to this issue, the Virginia Supreme Court in a 1918 decision stated that the statute did not apply on non-navigable streams unless the party making such a claim could show that the transfer took place after the statutory date. Although the court did not address the issue as it applies to navigable waters, the fact that non-navigable waters were singled out suggests that the burden of proof would lie with the landowner where navigable waters are involved. If this is the case, the statute would be presumed to apply unless the landowner could prove that the title could be traced to a point prior to the effective date of the statute.

II. Virginia Supreme Court Actions: Boerner v. McCallister

The right of a member of the public to use inland streams for recreation, in this case fishing, over the objections of a riparian landowner was the primary issue in Boerner v. McCallister, a 1955 decision of the Virginia Supreme Court. The court’s position regarding public rights, as indicated by the written opinion in the case, is central to any consideration of public rights since the question has not been directly considered in other cases.

The case arose as a suit for injunction to prohibit Boerner from continuing to fish in the Jackson River at a point above the City of Covington where McCallister owned riparian property. The lower court granted the injunction, and Boerner appealed the decision. McCallister’s property lay on
both sides of the river, but the fisherman avoided crossing land outside the stream channel by wading along the streambed from a point where a railroad right-of-way provided access. The landowner alleged this use to constitute a trespass; the fisherman maintained that the stream was subject to public use and declared his intention to continue to fish. The alleged right of public use was based on two arguments: (1) that the streambed was owned by the Commonwealth of Virginia, and (2) that the stream was navigable, thereby creating public rights of fishing and travel even if the streambed were privately owned.

To resolve the streambed ownership issue, the court considered the original source of the landowner’s title and the possible impact of state legislation. Private title to the land in question originally had been established under a land grant from the King of England between 1749 and 1751. The conveyance under the grant specifically included title to 270 acres and “... the rivers, waters and water courses therein contained, together with the privilege of hunting, hawking, fishing, fowling ...”23 The court held that the grant conveyed title to the streambed in question since no law existed to prevent such conveyance at the time of the grant. The court cited earlier Virginia decisions for the general proposition that the beds of non-navigable streams (the court’s consideration of the navigability issue is discussed in the next paragraph) are owned by the riparian owners. Note was taken of the previously discussed 1780 and 1802 state legislation affecting conveyance of streambeds, but the statute was held not to apply prior to these dates; therefore, it had no impact on the grant in question. Thus, the fisherman’s argument in favor of public ownership was rejected.

In order to dispose of the fisherman’s claim that public rights to travel and fish existed by virtue of the stream’s navigability, the court had to consider whether the stream was navigable at the point in question. The fisherman asserted that the stream had been used “... commercially for small boats, batteaus, or canoes, by a small steamboat, and for the commercial floating of logs ....”24 The primary evidence of navigability consisted of a showing that several efforts had been made between 1901 and 1907 to float logs down the river to a mill at Covington. The court concluded that this method of transportation was unsatisfactory since further attempts were not made. It stated that “[a] great preponderance of the evidence establishes the fact that the stream at the point in question is neither floatable nor navigable.”25 This determination by the state supreme court was based at least in part on the fact that the finding of
non-navigability by the lower court had been based on conflicting oral testimony. In such a situation, it was noted that the appeals court considers all the conflicts in evidence to be resolved in favor of the prevailing party, in this case, the landowner. Thus, the state supreme court held the stream to be non-navigable and prohibited further fishing expeditions.

Having determined the stream to be non-navigable, consideration of the extent of public rights in navigable streams was unnecessary. But after noting this fact, the Boerner court stated that “... there is persuasive authority to the effect that even though a stream may be floatable, and in some instances navigable, the public interest therein is limited to the right of navigation . . . .”26 Although this statement reflects the position of the court on the issue at the time of the decision, it has little value as legal precedent since it was unnecessary to the actual decision in the case. Thus, the court’s language suggests a more restrictive view of public rights than is supported by the Boerner decision itself.

III. Virginia Commission of Game and Inland Fisheries’ List of Public Streams

In an attempt to inform the public, the Virginia Commission of Game and Inland Fisheries (VCGIF) has published a list of streams it considers to be open to public use (Table 1). However, this list does not represent a conclusive legal classification but simply indicates VCGIF’s interpretation of the status of Virginia streams. Therefore, inclusion on the list does not create public rights not already in existence; neither does absence of a particular stream from the list constitute a conclusive determination that the stream is not open to public use. Although inclusion on the list does not guarantee public status, the list does tend to be conservative and includes only those streams already subjected to substantial public use. Streams of questionable status generally are not included, but in some cases ultimately may be determined to be public.
TABLE 1
Virginia Commission of Game and Inland Fisheries' Tentative List of Public Streams of Virginia, Exclusive of Tidewater (Downstream Point Listed First)

1. New River: West Virginia line to North Carolina line.
2. Clinch River: Tennessee line to Carbo, Virginia (Russell County).
3. South Holston: South Holston Lake from Tennessee line to Alvarado, Virginia (Washington County).
4. Cowpasture: Iron Gate, Virginia (Alleghany County), to Rt. 60 bridge.
5. Jackson: Iron Gate, Virginia, to Westvaco Dam at Covington.
6. Jackson: 14 miles on state property (Gathright).
7. James: Mouth to Iron Gate, Virginia.
8. Appomattox: Mouth to Rt. 15 in Buckingham County.
9. Rivanna: Mouth (confluence with James) to Greene County line.
10. Chickahominy: Mouth (confluence with James) to Rt. 60 at Bottoms Ridge.
11. Pamunkey: Mouth (confluence with Mattaponi) to Rt. 360 bridge.
12. Mattaponi: Mouth (confluence with Pamunkey) to Rt. 360 bridge.
13. Willis: Mouth (confluence with James) to Rt. 634 Cumberland County.
14. Maury: Mouth (confluence with James) at Glasgow to Lexington.
15. Roanoke: North Carolina line in Gaston Reservoir to, and including, Smith Mountain Reservoir.
16. Dan: Halifax County line (confluence with Roanoke River) to Danville.
17. Meherrin: North Carolina line to Rt. 49 in Lunenburg County.
18. Nottoway: North Carolina line to Rt. 63 in Nottoway County, restricted in Camp Pickett.
19. South Fork Shenandoah: Riverton to Port Republic.
20. North Fork Shenandoah: Riverton to bridge at Timberville.
22. North River: Mouth (Port Republic) to Bridgewater Dam.
23. Rapidan: Mouth (confluence with Rappahannock) to Raccoon Ford in Culpeper County.
24. Rappahannock: Mouth to Rt. 211 in Fauquier County.
25. Occoquan Creek: Maryland line to Rt. 123 bridge.
26. Dragon Run: Mouth (confluence with Piankatank) to Rt. 17 in Middlesex County.
27. Blackwater: North Carolina line to N&W railroad bridge at Zuni.
28. Philpott Lake.
THE NAVIGABILITY ISSUE

Since the preceding declarations of public recreational rights do not fully define the extent of such rights, consideration must be given to other factors affecting these rights. Navigability is a central factor in the determination of public rights, both as a direct source of public rights and indirectly through its impact on streambed ownership. Three basic issues in need of consideration are: (1) the definition of "navigable," (2) specific legal actions concerning navigability of Virginia streams, and (3) the extent of the public rights encompassed by the concept of navigation.

I. Definition of "Navigable"

Several definitions of "navigable waters" have been developed in the law, each for a particular application. Somewhat different criteria have been developed for each of these applications, making it necessary to consider the intended purpose prior to a specific determination of navigability. Several concepts of navigability and their potential relevance to public recreational rights are considered below.

A. Federal Commerce Clause Navigability

The concept of navigability that has undergone the greatest development has been related to questions of federal jurisdiction under the Commerce Clause of the U.S. Constitution. Although the U.S. Supreme Court first held in 1824 that the Commerce Clause encompassed navigation, the basic federal definition of "navigable waters" was not established until 1870 in the case, The Daniel Ball. The Court in the following statement addressed the applicability of the English common law navigability test to U.S. waters:

The doctrine of the [English] common law as to the navigability of waters has no application in this country. Here the ebb and flow of the tide do not constitute the usual test, as in England, or any test at all as to the navigability of waters. There no waters are navigable in fact, or at least to any considerable extent, which are not subject to the tide, and from this circumstance tide-water and navigable water there signify substantially the same thing. But in this country the case is widely different. Some of our rivers are as navigable for many hundreds of miles above as they are below the limits of tide-water, and some of them are navigable...
for great distances by large vessels, which are not even affected by the tide at any point during their entire length.

The Court then stated\textsuperscript{31} the American test as follows:

Those rivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.

The basic definition established in 1870 has been subject to numerous expansive interpretations in subsequent cases to come before the U.S. Supreme Court. Prior to large-scale federal involvement in environmental protection, commerce clause jurisdiction was exercised in two principal ways: (1) through federal regulation of private dam construction and other activities that would potentially interfere with navigation by means of such legislation as the Rivers and Harbors Act of 1899\textsuperscript{32} and the Federal Power Act;\textsuperscript{33} and (2) through construction of federal water projects for improvement of navigation as well as the accomplishment of other purposes. As a result of court decisions defining federal jurisdiction in these areas, streams that have come to be viewed as within the federal power to control navigable waters include those that have at some past period been navigable,\textsuperscript{34} those that can be made navigable by improvements,\textsuperscript{35} and non-navigable streams that affect the navigable capacity of a navigable stream.\textsuperscript{36}

The broad judicially developed definition of navigable waters for defining the jurisdiction of the Rivers and Harbors Act of 1899 was somewhat restricted by a provision in the Water Resources Development Act of 1976,\textsuperscript{37} stating that certain provisions of the Rivers and Harbors Act do not apply to an intrastate body of water considered navigable solely on the basis of historical use in interstate commerce. This provision was used as a basis for a recent decision\textsuperscript{38} by the U.S. Court of Appeals for the Fourth Circuit that Virginia's Smith Mountain Lake was not subject to the jurisdiction of the U.S. Army Corps of Engineers under that Act.

However, federal regulatory jurisdiction under the commerce clause is no longer restricted to protection of navigable capacity under the 1899 Act; another mechanism also exists in the form of federal pollution con-
trol law. Not only has this legislation expanded federal jurisdiction in terms of objectives, but it has also expanded the concept of navigability. "Navigable waters" are defined in this law simply to mean "... the waters of the United States, including the territorial seas." By omitting any reference to actual physical suitability for navigation, the definition encompasses all the waters of the United States. The broad scope of this definition is reflected in regulations adopted by the U.S. Army Corps of Engineers pursuant to this legislation for control of dredge-and-fill activities. Although the regulations exempt certain waters (for example, non-tidal streams upstream from the point where the average flow first exceeds five cubic feet per second) from the individual permit requirement, Corps regulatory jurisdiction extends to all the nation's significant bodies of water, including their adjacent wetlands.

However, the extension of federal jurisdiction for specific regulatory purposes does not necessarily result in a corresponding expansion in the public right of recreational usage. Law defining federal jurisdiction is largely independent of that defining the resolution of property rights issues among individual parties. Thus, the requirement that a landowner must acquire a section 404 permit to modify a streambed does not create a public right of use where none existed previously.

B. Title Navigability

Since navigability is a significant determinant of streambed ownership, the term "navigable waters" needs to be defined in this context (streambed ownership is the subject of the next section of this report; the discussion here is focused on the definition of navigability used in this determination and does not consider bed ownership in detail). The concept of title navigability has been developed primarily in court decisions involving conflicts between the federal government and individual states as to ownership of submerged lands. Such conflicts generally involve western states formed from land once owned by the federal government.

The definition of "navigable waters" used to decide the federal vs. state ownership question has been distinguished by the federal courts from the traditional definition used to determine commerce clause jurisdiction. However, title navigability has not been discussed as extensively. The basic definition of title navigability that has been enunciated appears to include only those waters that are susceptible to being used in their natural condition for commercial purposes on the date a state was admitted to
the Union. Title navigability therefore appears narrower than the definition used for traditional commerce clause purposes. For example, streams susceptible to being made navigable by reasonable improvements would be navigable under the commerce clause definition but may be considered non-navigable for title purposes.42

In addition to use in resolving the question of whether a state or the federal government owns a particular streambed, the title navigability standard has been employed also to determine whether land grants to private individuals conveyed title to streambeds. One such application involves federal land grants on the public domain. Certain states also have relied on the federal title navigability standard to determine which streambeds passed into private ownership as a result of state land grants to individuals. However, not all states have explicitly recognized the title navigability standard, particularly the original 13 states (and states derived therefrom) which were never confronted with the issue of which streambeds were conveyed from federal ownership upon attaining statehood.

A significant question with respect to the 13 original states is the extent, if any, to which the English definition of navigability has been adopted for title purposes. As noted previously, the term "navigable" was essentially equivalent to "tidal" under English law. Although the right of public navigation under English law may have included certain non-tidal waters, it appears that the limit of tidal action was accepted uniformly as the limit of public bed ownership; the beds of all non-tidal streams were the property of the adjacent riparian landowners.43 Most of the states have rejected the English definition of "navigable" for purposes of defining bed ownership and have applied the "navigable-in-fact" standard employed by the federal government;44 but some of the states that apparently accepted the English tidal standard at an early point in history have not clarified its current status. Virginia appears to have joined the majority in accepting the navigability-in-fact standard, but a degree of uncertainty remains, as is discussed in later sections of this report dealing with the bed ownership issue.

C. Recreational Navigability

Navigability usually is defined in the United States in terms of susceptibility to traditional commercial use, but certain states have adopted a test based on susceptibility to recreational use.45 Under this approach, a body of water that is suitable for use by canoes or other shallow-draft
boats would be navigable, even if such use were strictly for recreational purposes. This concept of navigability obviously is broader than the commercial-use test but has been recognized in only a few states. As discussed in a later section, the Virginia Supreme Court to date has defined navigability solely in terms of commercial use but has not had occasion to reject explicitly the recreational standard.

II. Specific Determinations of Navigability in Virginia

Several of Virginia's waterways have been subjected to navigability determinations. These determinations have taken three principal forms: (1) actions by the Virginia General Assembly, (2) decisions by the Virginia Supreme Court, and (3) actions by federal authorities, including the federal courts and the U.S. Army Corps of Engineers.

A. Virginia General Assembly

Actions Regarding Navigable Waters

The Virginia legislature has enacted a variety of statutes dealing with navigable waters, particularly during the early history of the state when navigation on the state's internal waterways was a basic form of transportation. Many of these laws apply to individual streams, including declarations that certain streams are navigable, authorizations of navigation improvements, and prohibitions of obstructions to navigation. These last two types of legislative action would appear to be implicit recognition by the legislature of the general susceptibility to navigation of the stream in question. In addition to statutes affecting individual streams, others of more general applicability have been enacted. This type of legislation usually consists of general prohibitions against obstructions to navigation.

Statutes Applicable to Individual Streams: The authority of the General Assembly to enact laws applicable to specific waters at present is constrained by a constitutional prohibition against local, special, or private laws "declaring streams navigable, or authorizing the construction of booms or dams therein, or the removal of obstructions therefrom."46 The terms "local," "special," and "private," when used to describe statutory enactments, refer to law that arbitrarily singles out and applies to individual persons, places, or things. However, legislation is not invalidated as being "special" if it creates reasonable classifications relative to the purposes of the legislation.47 The legislature generally is given broad discretion in determining the necessity and reasonableness of statutory
classifications. The prohibition in the Virginia Constitution applicable to navigable waters apparently has not been subjected to interpretation by the Virginia Supreme Court.

Many of the currently existing statutes applicable to individual streams were enacted at earlier periods in the history of the Commonwealth and have not been codified as part of the current Code of Virginia. An exception is a provision which makes unlawful the placing of any dam or other obstruction in any tributary of Big Sandy River "... so as to prevent the free passage of timber, or any raft or boat ...." The placing of refuse or other material in the channel of Big Sandy or its tributaries so as to restrict the channels or impede the natural flow also is made unlawful.

A substantial number of similar acts passed by the General Assembly continue in effect as law but exist only in the Acts of Assembly published for each legislative session. This situation creates problems with regard to identification of such statutes. The session laws are indexed, but these indices are not standardized. Whereas navigation statutes may be found under a heading of "navigable waters" in one volume, in another they may be indexed solely under the name of the particular stream involved. Therefore, it is likely that any search will fail to locate all such statutes. In addition, a subsequent repeal of one of these acts may go undetected due to lack of a systematic procedure for locating subsequent legislative action. A further problem concerns identification of the streams involved, particularly in the case of the smaller, lesser-known waters. In an earlier period, statutory descriptions of streams often were based exclusively on local features and property of individual landowners. Since state boundaries, county boundaries, and local place and stream names have changed subsequent to the early days of statehood, some of the early statutes are difficult to relate to geographic locations. Those that clearly apply to waters outside current state boundaries (for example, within the State of West Virginia) can be eliminated, but others not easily identifiable may be erroneously classified as to location within or without the current boundaries of the Commonwealth.

Subject to these limitations, a list of statutes applicable to specific waters is contained in the Appendix. Several of the streams listed have been subject to more than one statutory enactment concerning navigation, but generally only one statute per stream is included. The enactment of broadest geographical coverage has been selected for inclusion in such
cases. The list begins with the most recent statute and proceeds in reverse chronological order.

The impact of these statutes on the present navigability status of one of the affected streams is not clear. A 1914 decision of the Virginia Supreme Court, *Old Dominion Iron and Nail Co. v. C & O Railway Co.*, gave consideration to the impact of legislative control on riparian rights and streambed ownership (to be considered in a later section), but the navigability of the stream was not in question. Therefore, the effect of the statute on a determination of navigability was not addressed.

It would appear that the weight to be given a previous legislative pronouncement regarding navigability of a particular stream on the current status of the stream would depend at least in part on the extent to which the legislation resulted in public use. Many of the statutes listed in the Appendix simply appointed a board of trustees to raise funds locally and oversee their expenditure for navigation improvements. Not all such ventures were successful. Thus it is unlikely that a declaration of navigability or authorization of a navigation improvement alone would be accepted as a conclusive indication that a stream is legally navigable. The extent to which public use actually developed would likely be a significant determinant of the effect to be given the legislative action. In this view, a past legislative pronouncement concerning navigability would constitute but one factor bearing on a current judicial determination of navigability.

Some of the navigation statutes appear to have been attempting to create navigable conditions where none previously existed; the potential constitutional questions raised by conversion of non-navigable streams to navigable ones have not been answered. The Virginia Supreme Court considered one aspect of this issue in the 1828 case of *Crenshaw v. Slate River Co.* The case concerned the validity of a Virginia statute authorizing navigation improvements and requiring owners of existing milldams to make provision for the passage of boats at their own expense. The milldam involved in the lawsuit had been established according to proceedings specified in state law. One of the requirements of this law was appointment of a special citizens board to consider the effect of the proposed dam on navigation (among other things) and how any potential obstruction could be avoided. With regard to the dam in question, the board had imposed no conditions to protect navigation; the court accepted this as evidence of the stream’s non-navigability. After proper authorization
and years of successful operation, imposition of a requirement to construct a lock for the passage of boats was viewed by the court as an unlawful invasion of the mill owner’s rights. Thus, the statute was held to be unconstitutional and void.

The Crenshaw court largely limited its considerations to the validity of the requirement for construction of a lock at the mill owner’s expense. It specifically declined to consider the more general issue of whether action by the state legislature declaring non-navigable streams to be navigable was prohibited by constitutional protection of private property rights. Although the impact of a simple declaration of navigability on private rights may not be as dramatic as the requirement regarding construction of locks, such a declaration would involve impacts. Any public use resulting from the declaration would constitute a previously non-existing restriction on private property interests. The validity of state action imposing such restrictions has not been directly addressed by the Virginia court.

In contrast to the unresolved nature of this issue in Virginia, the authority of state government to create public rights in non-navigable waters has been addressed in the courts of other states. A primary example is given by Hartman v. Tresise, a 1905 decision of the Supreme Court of Colorado. This case involved the right of public fishing on a non-navigable stream. One basis for the claim that a public right existed was a state statute holding that the public “. . . shall have the right to fish in any stream in this state, stocked at public expense, subject to actions in trespass for any damage done property along the bank of any such stream.” The court found the statute to be in violation of the state constitution. The state legislature was held to have no authority to take private property without compensation for use by other individuals. Inclusion of the provision that fishermen would be liable for actual property damage was not sufficient to allow the state to authorize trespass on private lands.

Another state supreme court decision considering the power of the state to establish public rights is the 1936 Alabama case of Hood v. Murphy. The court in Hood interpreted a statute that provided all waters of the state to be public if they flow through the lands of more than one person, but that permission was necessary for fishing upon posted lands. The court viewed the statute in question as strictly a measure for giving the state the right to regulate fishing and not as an attempt to take away private property rights. With regard to fishing in non-navigable streams,
the Alabama court indicated that the state cannot take away the exclusive right of the landowners.

Not all legislative attempts to define or expand public recreation rights have been challenged. An Indiana statute\textsuperscript{56} provides the following:

The natural resources and the natural scenic beauty of Indiana are declared to be a public right, and the public of Indiana is hereby declared to have a vested right in the preservation, protection and enjoyment of all the public fresh water lakes, of Indiana in their present state, and the use of such waters for recreational purposes.

As used in this provision, "public fresh water lakes" means "... all lakes which have been used by the public with the acquiescence of any or all riparian owners ...",\textsuperscript{57} with certain exemptions specified. This legislation therefore appears to have the intent of transforming public use rights based on acquiescence of the landowner into permanent rights legally enforceable against the landowner. This Indiana provision apparently has not been challenged as to its constitutional validity.

**General Statutes Protecting Navigability:** With regard to general navigation legislation not limited to a particular stream, several statutory provisions are currently in effect in Virginia. One such enactment\textsuperscript{58} consists of the following limitation on the power of state courts to authorize construction of dams that would interfere with navigation:

Where a watercourse is navigable, or by law declared a public highway, no court shall grant leave to any person to erect in that part of it any dam which will obstruct ordinary navigation or the passage of fish; and where any law has been or shall be enacted for opening, improving or extending the navigation of a watercourse no court shall, while such law is in force, grant leave to any person to erect any dam or other obstruction across or in such watercourse which will in any way interfere with the navigation thereof without express authority of law or the consent of the company incorporated to open, improve or extend such navigation. Any such dam shall, notwithstanding it may be built under such leave, be deemed a nuisance, and may be abated as such, or such company or the State may make a lock or locks in such dam.
for the passage of vessels and boats without being required to make compensation therefor.

The principal authority under which the courts traditionally have authorized dam construction consists of the milldam statutes. This law itself contains a provision to protect navigation. The court is authorized to impose terms and conditions on any approval granted, specifically including the provision "...that ordinary navigation and the passage of fish shall not be obstructed...".

Since the requirement to protect navigation traditionally has been included in the milldam acts, it might be argued that action of a court in authorizing the construction of a dam without navigation facilities constitutes evidence that the stream was not viewed as navigable. This position is given support by a majority opinion by Judge Carr in the previously discussed Crenshaw case. The holding that the stream in question was non-navigable was based in part on the fact that a milldam had been authorized previously without conditions to protect navigation. Thus, the history of milldam construction on a particular stream constitutes relevant evidence as to earlier perceptions of navigability.

In addition to dam construction, statutory protection of navigation also includes other types of interferences as indicated by the following provision:

It shall be unlawful for any person to throw or otherwise dispose of trash, debris, tree laps, logs, or fell timber or make or cause to be made any obstruction which exists for more than a week (excepting a lawfully constructed dam) in, under, over or across any river, creek, stream, or swamp, so as to obstruct the free passage of boats, canoes, or other floating vessels, or fish in such waters.

This provision protects public rights of passage wherever such rights exist; however, it is a regulatory measure prohibiting certain activities. It does not address the general issue of public rights; therefore, it cannot be interpreted as creating public rights not otherwise in existence.

A further statutory protection of navigability consists of a provision authorizing the Marine Resources Commission to effect the removal of abandoned wharves or other hazards or obstructions to the lawful use
of waterways. Due to the geographical limitation of the Commission’s jurisdiction, this measure is of significance primarily in tidal waters.

B. Navigability Determinations by the Virginia Supreme Court

Although the Virginia Supreme Court has made navigability determinations with respect to several streams in the state, it has never extensively considered the basic criteria for this determination. In some of its early decisions involving rights dependent on navigability, the court simply declared the stream in question to be navigable or non-navigable without consideration of the underlying factors.

One of the earliest cases to consider navigability criteria is the 1906 case of *Hot Springs Lumber and Manufacturing Co. v. Revercomb*. The case involved the practice of floating logs to a downstream mill site. The right to make such use of the stream depended on whether the stream was "floatable." In a rehearing of the case in 1910 in which its earlier decision was upheld, the court summarized its test as follows:

[T]o constitute a stream a public highway it must be of such a character as that it can be substantially useful to the public in transporting the products of the fields and forests.

Thus, the court adopted a test depending solely on physical capacity for use. The court further held that the physical capability for floating need not exist at all times. Seasonal floatability of a reasonably predictable nature was held to be adequate. With regard to the stream under consideration in the case, the Jackson River, the court reversed a lower court decision holding the stream not to be floatable and remanded the case for further consideration in accord with its enunciated criterion.

The court established a definition of navigability in the more general sense of the term in the 1941 case of *Ewell v. Lambert*. In this case, a landowner was attempting to prove private ownership of a creek, thereby preventing the state from controlling oyster bed rights. State ownership existed only if the waters involved were navigable. The court applied the following navigability test:

The question of navigability is one of fact. Its determination must stand on the facts of each case. The test is whether the stream is being used, or is susceptible of being used, in its natural and ordi-
nary condition, as a highway for commerce, on which trade and travel are or may be conducted in the customary modes of trade and travel on water.

This definition is based on the language of the original federal definition established in the 1870 federal case, *The Daniel Ball*, which is cited by the *Ewell* court as authority. But the citation of authority also includes subsequent federal cases that have given a broad interpretation to the language of *The Daniel Ball*. For example, the citation includes *United States v. Appalachian Electric Power Co.* in which the U.S. Supreme Court held that waters subject to being made navigable by reasonable improvements were included in the definition established in 1870, although the original definition referred to waters in their "ordinary" condition. The Court in the *Appalachian* case interpreted the term to refer only to volume, gradients, and regularity of flow and therefore to include waters made usable by artificial improvements. Although the Virginia court in *Ewell* adopted approximately the same language used in *The Daniel Ball* without specific reference to such expansive interpretations, the citation of later federal cases responsible for the expansions at least creates the possibility that the broad interpretation of the definition was being accepted. The court has not resolved these uncertainties in its subsequent decisions.

In *Boerner v. McCallister*, the Virginia court had the opportunity to review the navigability test established in *Ewell* in the context of use for recreational purposes, but it simply reiterated the test set forth in *Ewell*. No reference was made to the recreational use standard adopted in some states. Of course, recreational boating was not an issue in the case since the contested fishing operations involved wading. Thus, the court was not called upon to consider specifically the recreational standard, but no indication has been given that it may adopt this test.

The Virginia court to date apparently has not recognized the existence of more than one definition of navigability as has been done in the federal courts. In the few cases decided, it appears to apply the same standard for all purposes. The two cases where the test has been most clearly enunciated, *Ewell* and *Boerner*, involved bed ownership. Therefore, the navigability-in-fact standard would appear to be the established test for bed ownership determinations.
But the question of what role, if any, remains for the English test for title purposes still exists. Since English law was significant during the settlement period of the Commonwealth, it would be expected that any complete departure from such law would involve an explicit rejection by the court. While *Ewell* and *Boerner* appear to reject the English test by implication, no specific statement of repudiation is given. In fact, the court in *Boerner* stated that "[t]he common law of England continues in force in this jurisdiction except as altered by the General Assembly." This statement perpetuates at least some degree of uncertainty regarding potential future application of the English test for determining bed ownership.

C. Federal Determinations of Navigability Affecting Individual Streams in Virginia

It has been noted previously that definitions of navigability for delineating federal regulatory jurisdiction are not necessarily relevant to the public rights issue; but a federal determination of navigability may be potentially relevant where the federal test coincides with state criteria. Since the state relies principally on navigability in fact as indicated by past commercial use, any federal determination based on this standard is therefore of interest.

The most prominent federal declaration of navigability concerning a Virginia stream is contained in the *Appalachian* decision cited above. This case involved the authority of the federal government under the *Federal Power Act* to regulate construction of a hydroelectric project on New River above the City of Radford. The Court applied the principle that a stream is legally navigable if it can be made suitable for commercial use by means of reasonable improvements. With regard to the New River, the Court held the stream to be navigable upstream to Allisonia, Virginia.

A recent determination by a federal court of the navigability of a Virginia waterway is contained in the previously cited 1978 decision of the U.S. Court of Appeals for the Fourth Circuit in *State Water Control Board v. Hoffman*. At issue in the case was the jurisdiction of the U.S. Army Corps of Engineers (COE) over Smith Mountain Lake under the Rivers and Harbors Act of 1899 (RHA). The court held that the lake was not within COE jurisdiction under RHA because of a provision of the Water Resources Development Act of 1976 stating that provisions of RHA concerning wharves and piers do not apply to intrastate bodies of water.
considered navigable solely on the basis of historical use in interstate commerce. The principal result of the decision is that COE permits are no longer required for construction of piers; however, the decision does not affect COE jurisdiction under section 404 of the Clean Water Act concerning dredge-and-fill activities. Due to this decision's dependence on special statutory provisions concerning the jurisdiction of RHA, the case would appear to have little significance with regard to broader considerations of navigability.

Another mechanism through which the federal government has made navigability determinations consists of administrative decisions by COE. For example, COE has determined that the Jackson River above Covington is a navigable stream. On February 23, 1978, the Division Engineer of the Corps' North Atlantic Division issued the following statement: 79

[D]ue to the past use and possible future use of the Jackson River as a route for interstate commerce, I hereby determine the Jackson River a navigable water of the United States from its mouth to its confluence with Back Creek at river mile 55 for the purposes of exercising Corps of Engineers regulatory jurisdiction . . . . This determination is based on [court] decisions . . . which have held that the present or past use of a waterway for interstate commerce renders the waterway a navigable water of the United States.

The basis for this determination was the past use of the stream for floating logs. The Division Engineer's statement noted that timber had been floated from the confluence of Back Creek and Jackson River (river mile 55) to a mill at the lower end of Kincaid Gorge (river mile 42). Note was taken of log floating below Kincaid to Covington during 1902 and 1903. This latter activity apparently was considered by the Virginia Supreme Court in Boerner and found to be unsatisfactory evidence of navigability because of the limited scope of the operation. The COE position is thus in direct conflict with the finding of the state court. Determinations of navigability by COE are not conclusive but are subject to challenge in the federal courts. Resolution of the conflict regarding the status of the Jackson River above Covington will likely involve further judicial proceedings.

COE also has conducted studies of other Virginia streams to determine the upper limits of navigability. An example of a stream subjected to
such investigation is the Maury River, which flows into the James at Glasgow, Virginia. The following statement is from a report prepared for COE:

The head of navigation on the Maury River is Cedar Grove, a former commercial community about 10 miles north of Lexington, Virginia. Justification for this determination is based primarily upon: (a) the shipping established from that point in the first half of the 19th Century, (b) the legislative authority granted by the Virginia General Assembly to improve navigation to that point, and (c) the physical characteristics of the river. None of the tributaries to the Maury below Cedar Grove is navigable.

The specific information on which this conclusion is based would likely constitute persuasive evidence in any judicial proceedings concerning the navigability of the stream.

III. What Does “Navigation” Include?

The suggestion in the Boerner case that public rights in navigable streams may be limited to transportation represents a potentially significant restriction on recreational use. Under this approach, the right of fishing would not exist where streambeds were privately owned, even if the right of navigation were recognized. A question also continues as to the existence of a public right of recreational boating not related to commercial activity. It is important, however, to re-emphasize the fact that the Boerner court was not specifically deciding either of these issues since the stream in question had been held to be non-navigable, thereby eliminating the need for the court to make a legal holding concerning public rights in navigable streams.

The concept that the rights of fishing and navigation are separable is supported by an earlier decision of the Virginia Supreme Court, Commonwealth v. City of Newport News. This case arose as a suit by the executive branch of state government to enjoin the City from dumping untreated sewage into Hampton Roads. The state alleged that a new city sewer would substantially impair the right of fishery in large segments of Hampton Roads, an activity alleged to be a basic public right of the same nature as the right of navigation. The decision of the court was quite explicit that the rights of fishing and navigation are not equal rights of the same character. The court stated that the navigation right was held
by the state in its role as representative of the people’s fundamental rights. The court likened the right of navigation to the right of an individual to move freely from place to place. The fishing right, on the other hand, was viewed as originating from the state’s role as proprietor of all publicly owned property. Therefore, it was viewed as a right that can be extinguished, provided the public benefits from the decision in some way.

The court’s decision in this case upholding the legality of an untreated sewage discharge has little standing under current attitudes toward environmental degradation and legal controls developed in subsequent years. However, the court’s distinction between the nature of navigation rights and fishing rights may represent valid precedent in support of the position suggested by the Boerner court.

While the Commonwealth decision may support separation of navigation and fishing rights, other legal developments may counter this distinction. The court in Commonwealth largely based the separability of the two rights on the view that navigation was of a more fundamental nature than fishing. It is interesting to speculate as to the possible impact that a recent addition to the Constitution of Virginia would have on such a comparison if made today. The following provision was added to the Constitution in the revision that became effective in 1971:

To the end that the people have clean air, pure water, and the use and enjoyment for recreation of adequate public lands, waters and other natural resources, it shall be the policy of the Commonwealth to conserve, develop, and utilize its natural resources, its public lands, and its historical sites and buildings. [emphasis added].

This language appears to establish recreation as a valid objective of the Commonwealth’s natural resources policy and therefore may enhance the relative standing of a recreational activity such as fishing.

Recognition of the public’s right to fish in navigable waters would appear to be consistent with the concept that fish in any natural body of water generally belong to the public; however, a reference work on real property law states that “[T]he general rule is that one who owns the land under non-tidal waters has the exclusive right to fish thereover . . . .” Twelve states are listed as accepting this view.
Although several states recognize the exclusive right of fishing to belong to the owner of the streambed, the courts in certain other states have given explicit recognition to recreational activities as part of the navigation right, even where private bed ownership is recognized. For example, the Supreme Court of Wisconsin in a 1914 decision made the following statement after noting that the riparian owners held title to the beds of navigable streams:

Navigable waters are public waters, and as such they should enure to the benefit of the public. They should be free to all for commerce, for travel, for recreation, and also for hunting and fishing, which are now mainly certain forms of recreation.

The Wisconsin position regarding public rights in navigable waters is based on the concept that the state holds rights of use in trust for the public which are superior to private property interests in streambeds. The concept of a public trust for full use of waterways can be traced to statutes organizing the Northwest Territory, from which Wisconsin was formed. Although such statutes have no legal impact on a state after it achieves statehood, the concept of broad access rights was given recognition in the Wisconsin Constitution, and the public trust concept continues to serve as the source of broad public rights in Wisconsin.

Recognition of public recreational rights in streams with privately owned beds perhaps reached its zenith with the 1954 decision of the Missouri Supreme Court, Elder v. Delcour. The case involved recreational use of a stream after notification by the landowner that such use would give rise to legal action. Use included floating by canoe; fishing; wading on the streambed; and use of the bank to portage around a log jam, to eat lunch, and to make minor canoe repairs. Although recognizing private ownership of the streambed, the state supreme court upheld the activities in question as lawful. It specifically recognized the public right of floating and use of the streambed for wading. The extent of the public right of portaging and other use of the streambanks incidental to navigation was not discussed since the landowner had not specifically contested that point. The canoeist had admitted liability for any actual damage to property caused by such activities, but the court neither accepted nor rejected this principle explicitly. The streambank use at least implicitly condoned in Elder would not likely be upheld in most states since public rights are generally limited to the stream itself, except perhaps in cases of emergency.
The broad recognition of public rights in *Elder* was based at least in part on interpretation of the original Constitution of Missouri and early federal laws concerning first the Territory and then the State of Missouri. Provisions in these documents concerning the preservation of navigable waters and their tributaries as public highways were seen as limitations on the landowner’s title to the streambed. Thus, the origin of public access rights in Missouri is similar to the basis of such rights in Wisconsin.

In some states, however, the right of the public to use privately owned beds of navigable streams may be limited even though the right of recreational boating and fishing from a boat is recognized. The following quotation from a 1961 decision by the Supreme Court of Wyoming establishes the limits of streambed use in that state:

> When waters are able to float craft, they may be so used. When so floating craft, as a necessary incident to that use, the bed or channel of the waters may be unavoidably scraped or touched by the grounding of craft. Even a right to disembark and pull, push or carry over shoals, riffles and rapids accompanies this right of flotation as a necessary incident to the full enjoyment of the public’s easement. . . . On the other hand, where the use of the bed or channel is more than incidental to the right of floating use of the waters, and the primary use is of the bed or channel rather than the floating use of the waters, such wading or walking is a trespass upon lands belonging to a riparian owner and is unlawful.

The public right of fishing that was recognized in the Wyoming decision was based on provisions of the state constitution and state legislation declaring water to belong to the state. Similar provisions appear in the law of many states, particularly western states where the law of prior appropriation is in effect for purposes of water allocation. These provisions serve as the basis for state control over the diversion and use of water; they generally have not been used to establish public fishery rights. The claim that a public right of fishing existed in Colorado by virtue of similar provisions in the law of that state was rejected by the Supreme Court of Colorado in a 1905 decision.

These positions adopted in the states of Wisconsin, Missouri, Wyoming, and Colorado indicate a wide range of views among the states regarding the extent of public recreational rights in waters with privately owned
beds. But some of the decisions clearly establish the principle that public rights of recreational usage can exist where streambeds are privately owned.

Although the Virginia Supreme Court has suggested that streams with privately owned beds may be subject to the exclusive use of the adjacent landowner for fishing purposes, the court has recognized fishing and boating rights in ponds that violate the principle of exclusive use by the owner of the bed. In resolving several cases involving rights in ponds, the court has indicated that the nature of such rights depends on the way in which bed ownership is defined. Where the owners hold title by deeds to separate portions of the bed of the pond such that boundary lines are distinguishable, each owner has been held to have exclusive control and use of the waters above his portion of the bed. Each owner has the right to erect a fence on the boundary line to prohibit others from boating, fishing, or trapping on his property. But in a case where ownership of the pond in question was based on riparian ownership of land adjacent to the pond, the following principle was applied:

[W]here the titles of the several riparian owners include the land covered by water, they may, as a general rule, together with their lessees and licensees, use the entire surface of the lake for boating and fishing, so far as they do not interfere with the reasonable use of the water by other riparian owners.

Recognition of rights of use in landowners' "licensees" appears to be a first step toward recognition of public rights. In addition to private guests of the landowners, licensees conceivably may include users of a commercial recreational facility operated by a riparian landowner. If the state were to acquire a property holding on such a pond for operation of a recreational facility, recognition of the rights of licensees would constitute recognition of true public use.

The limited number and size of natural ponds and lakes in Virginia has resulted in the absence of such developments, and the issue of public use on the basis of commercial or state-created access has not been addressed by the Virginia Supreme Court; however, public recreational rights have been recognized on this basis in other states. For example, the Supreme Court of Washington recognized the right of the public to use a non-navigable lake by means of a state-created access area in a 1966 decision. But the court found that uncontrolled public access had created unrea-
sonable conditions with respect to the owners of riparian property; it therefore conditioned the continuance of the public access area on development by the state of a plan of operation to safeguard the rights of the property owners.

Due to the scarcity of natural ponds in Virginia that possess substantial recreational potential, the decisions of the state court recognizing joint use in riparian landowners on ponds is unlikely ever to constitute a significant source of public recreational rights. But to the extent that such a position can be interpreted as potential support for public recreational rights on non-navigable waters with privately owned beds, the court's decisions in this area are somewhat in conflict with the portion of exclusive use by the streambed owner suggested in Boerner.
THE STREAMBED OWNERSHIP ISSUE

Since public recreational rights have not been recognized with regard to Virginia waters having privately owned beds, streambed ownership acquires important status as a potential determinant of such rights. Streambed ownership has already been discussed with regard to specific actions by the General Assembly to preserve ungranted streambeds in public ownership and thereby protect public rights in such waters. But the general bed ownership issue requires considerations broader in scope since these legislative actions do not apply to streambeds on land granted prior to their 1780 and 1802 effective dates.

When these statutes do not apply, determination of bed ownership depends on interpretation of the common law as it existed in England and was subsequently developed in Virginia. By its action in adopting the statute, the General Assembly implicitly recognized that, at least to some extent, prior land grants had included streambeds. However, the decisions of the courts fail to provide a clear indication of the extent to which streambeds had actually been granted.

Prior to analysis of the impact of English and early state land grants on bed ownership, another less direct but significant issue needing consideration concerns federal-state relations with regard to bed ownership. Both federal and state ownership are public in nature, but certain aspects of applicable federal and state law differ. Therefore the subject of federal-state relations concerning ownership of submerged lands will be addressed prior to consideration of the impact of private land grants on ownership of streambeds.

I. Federal-State Relations

The first question to be asked with regard to federal-state relations concerning streambed ownership is whether Virginia (and the other original colonies) relinquished existing state ownership of such lands by acceptance of the sovereignty of the federal government through ratification of the U.S. Constitution. The commerce clause of the Constitution has been interpreted as a source of broad federal powers over navigable waters, but the U.S. Supreme Court has held that existing state ownership of submerged lands was not relinquished by acceptance of the Constitution but was retained by each of the original states.97
States that were later formed from federal lands could make no similar claims for ownership of submerged lands; however, the U.S. Supreme Court has held that ownership of the beds of navigable waters (those identified in the concept of "title navigability" discussed earlier in this report) passed from the federal government to each state upon its admission into the Union. 98 The basis for this position is that the constitutional requirement that the states have "equal footing" would have been violated without transfer of bed ownership to these states. Of course, transfer to the states was limited to the extent that streambeds had been previously conveyed from federal to private ownership, but such conveyance was of restricted scope. Certain specific grants of land below high water mark on navigable waters were made on territorial lands, but as a general rule, grants of federal lands did not transfer title below high water mark where navigable waters were involved. 99 Thus, upon entering the Union, a state generally received title to the beds of most navigable waters within its boundaries as defined by the title navigability standard.

The common law principle that each state (or grantees of the state) owns the beds of navigable waters within its boundaries is reaffirmed by federal legislation in the form of the Submerged Lands Act. 100 The Act recognizes the title of each state, or that of persons entitled under state law, to lands underlying all non-tidal waters that were navigable under the laws of the United States at the time each state entered the Union. Also included are all lands covered by tidal waters from high water mark to a line three miles distant from the coastline.

II. Impact of English and State Land Grants to Individuals

Private ownership of land in Virginia has its origins in the system of land grants initiated in the colonial period by the British Crown and continued by state government after independence; therefore, questions of streambed ownership must be explored in the context of the terms of these grants and law governing these grants. Where grants contain provisions specifying the extent to which streambeds were included in the conveyance, ownership is a somewhat straightforward issue. For example, the grant covering the land involved in Boerner v. McCallister explicitly encompassed "rivers, waters and water courses," 101 creating a presumption that streambeds were granted. In most cases, however, grants apparently were silent as to whether streambeds were included in the conveyance. In these situations, reliance must be placed on general principles of common law to resolve the question of what was conveyed.
Under the English common law, the Crown held title to the beds of all tidal waters while the beds of all non-tidal waters were owned by adjoining landowners. Therefore, English land grants could be assumed to include title to streambeds of all non-tidal waters encompassed. The English common law was adopted in part by Virginia upon independence and continues to apply to some extent. With regard to ownership of land under water, the English rule is still in effect where tidal waters are involved. It is well-established that lands underlying tidal waters generally are publicly owned, with the limits of riparian property established by statute at low water mark. Extension of property boundaries to low water mark creates public beach access problems that will not be considered here due to the focus on inland waters.

Applicability of the English common law to non-tidal waters is complicated by definitional problems. Where a non-tidal stream is not navigable in fact, the English rule that its bed is owned by the riparian landowner is well-established in the law of Virginia, provided, of course, that the grant was not subject to the 1780 and 1802 statutory restrictions. Where the stream forms a property boundary, each owner takes to the center of the stream. If one owner holds title to land on both sides of a non-navigable stream, he owns the entire streambed at that point.

But ownership of the beds of non-tidal streams that are navigable in fact, a category not existing in English law, is not well-defined. The conflict in positions with regard to this issue is noted by the Virginia court in the following quotation:

There is great conflict of authority in the States as to the ownership of the bed of non-tidal navigable waters. The authorities are nearly evenly divided. The opposing views are well-stated [citation omitted] as follows:

'The size of many of the fresh water rivers of this country, and their capability of navigation, have induced some of the highest courts of several of the States to attach to them the common law consequences of navigability, thereby abrogating the common law distinction between them and those in which the tide ebbs and flows, so that grants bounded on such rivers stop at their margin. Thus in many States the same rule as to the ownership of and sovereignty over lands under the navigable fresh water rivers has been applied which obtains at common law as to the
ownership of and sovereignty over lands under tide waters, and such lands are regarded as held by the same rights in the one case as the other, and subject to the same trusts and limitations.

"According to this view, in the case of large fresh water rivers which are navigable in fact, the riparian owners do not take to the middle of the river, but the State is the owner of the subjacent soil, and the public have an easement in the river. . . .

"The view that the State has title to the bed of navigable fresh water courses is not uniformly followed by all the States, but there is a strong array of authorities opposed thereto, which do not regard the greater size of rivers in the United States as furnishing a sufficient reason for departing from the rule at common law. They have, therefore, held to the strict application of the common law rule that only those rivers in which the tide ebbs and flows limit grants of lands adjoining to high water mark, and that in all others, without regard to size or capabilities for transportation and commercial intercourse, the middle of the river is the boundary of lands on either side, except in some cases where a different rule has been applied owing to the terms of the original grant, and is subject only to the public right of navigation."

A treatise on real property states that the English rule of ownership of the beds of non-tidal navigable streams by adjacent riparian landowners is in effect in nine states, including Illinois, Kentucky, Maine, Massachusetts, Michigan, Nebraska, New York, Ohio, and Wisconsin. The view that such beds are owned by the state is said to be in effect in 16 states, including Alaska, Alabama, California, Florida, Idaho, Iowa, Kansas, Minnesota, Missouri, Montana, North Carolina, Oklahoma, Oregon, Pennsylvania, Texas, and Washington. Insufficient information apparently existed for the author to classify the remaining states, a group that includes Virginia.

The ownership of the beds of non-tidal navigable streams is an important issue regarding public recreational rights in Virginia. One reason for this significance is the existence of a substantial number of such streams. Secondly, the Virginia Supreme Court has indicated that the right of navigation may not include the right of fishing where beds are privately owned. This question has not been specifically decided, but the possibility of this position's being adopted increases the potential importance of
the ownership issue. However, the Virginia Supreme Court does not appear to have made a clear pronouncement as to the ownership of such streambeds.

In spite of this lack of a definitive statement as to bed ownership in general, the state court has decided a number of cases involving specific determinations of bed ownership. As noted previously, the navigability of the stream in question traditionally has been a significant factor in such determinations. However, these cases were decided for a substantial period of time in the absence of an established definition of navigability. Thus, statements of the court pertaining to bed ownership of “navigable waters” must be considered with caution since the exact meaning of the term as used by the court may be unclear.

Most of the early cases to consider the bed ownership issue arose in connection with a state milldam statute. This law allowed a riparian owner to condemn one acre of land on the opposite shore for use as a dam abutment, provided that either the landowner or the state had title to the bed of the stream. One such case was the 1798 decision of Home v. Richards where the following statement by Judge Roane (at this point in history, separate opinions by the justices were published) addressed the ownership issue:

[I]t is not clear to whom the bed of the river belongs; for it is not stated, in the proceedings, whether the stream is navigable in those parts or not. If it be, it is plain that the bed is not in the appellants, as the soil of navigable rivers cannot be granted . . . .

Although bed ownership was seen as dependent on navigability of the stream, the criteria for this determination were not discussed. There was no discussion of whether the stream at the point in question (the Rappahannock River at Falmouth) was influenced by tidal action. Due to the fact that milldams require flowing water for operation, it appears likely that the site was above tidal influence. The court’s discussion of navigability without reference to tidal action suggests that the navigability-in-fact test was accepted as the standard by which to determine bed ownership.

The fact that the beds of navigable streams could be granted in certain situations was recognized by the state supreme court in the 1805 decision
of *Martin v. Beverly*\textsuperscript{110} where Justice Roane made the following statement:

> If the bed of all navigable rivers actually belonged to the commonwealth, it would be sufficient to state that the land proposed as the site of such mill adjoined the river. But the fact is, and is so admitted by many of our laws, that the beds of navigable rivers are granted to individuals.

Some of the laws mentioned in the Roane opinion were discussed in the following statement\textsuperscript{111} by Judge Tucker:

> Although the bed of all navigable streams below the falls may be presumed to be in the commonwealth, yet several acts of assembly seem to admit that they may have been granted away to other persons.

> Thus the act concerning titles to lands in the Northern Neck, recites a grant, to the ancestors of Lord Fairfax, of the rivers Rappahannock and Potomac themselves, and of all islands within their banks [citation omitted]. So the act to prevent unlawful hunting and ranging gives a remedy against persons, who shall fish or fowl in any creeks or waters within the bounds of any other person [citation omitted]. And the act concerning the land office reserves the bed of any river or creek, in the eastern part of the commonwealth which may have remained ungranted by the former government.

In addition to listing examples of statutes conveying specific portions of the beds of navigable streams to private ownership, the above quotation also at least suggests an underlying acceptance of the English definition of navigability for purposes of determining bed ownership. It is stated that "... the bed of all navigable streams *below the falls* may be presumed to be in the Commonwealth [emphasis added]..." The term "below the falls" appears to be a reference to the fall line, the dividing line between tidal and non-tidal waters. Does this statement indicate that the court presumed all streambeds above the fall line to be in private ownership? The decision does not provide resolution of this question.

In *Mead v. Haynes*,\textsuperscript{112} a 1824 decision, a landowner proposing to build a milldam claimed title to the bed of Goose Creek at a point in Bedford
County by virtue of a land patent issued in 1792 which specifically granted the bed. Another landowner opposed the request for permission to build the dam on the grounds that neither the builder nor the Commonwealth held title to the entire bed, a mandatory condition specified by statute. The court cited the *Home* case and made the following statement\(^{113}\) as to the rule of law concerning the beds of navigable and non-navigable streams:

\[
\text{[E]ven before the act of 1792 [citation omitted], the beds of navigable streams were not grantable, and . . . a grant bounded by a stream not navigable, extended to the middle of the stream.}
\]

The court held that since Goose Creek was not navigable, the patent of the party proposing the dam could have conveyed title to the bed of the stream. However, in this instance, the opposing landowner had owned the riparian property on the opposite side of the stream prior to the date of the patent and therefore held earlier title to one-half the bed of the creek. The proposed dam could not be constructed because neither the owner nor the state had title to the entire streambed.

This case presents the same problem encountered previously; the criteria on which the determination of navigability is based are not discussed. Since the stream apparently was both non-tidal and physically unsuitable for navigation, the determination would likely have been the same under either test. Thus, the case leaves unanswered the question of which test was viewed as appropriate.

Decided shortly after *Mead*, the case of *Crenshaw v. Slate River Company*\(^{114}\) appears to suggest a continuing sympathy toward the English rule for determining bed ownership. The primary issue in the case was the legality of a state statute requiring modification of a mill dam to accommodate navigation. Bed ownership was somewhat incidental and the comments of the judges do not establish binding precedent, but a certain insight into the issue is provided. Of most interest are the considerations of Judge Carr. He appeared to accept a navigability-in-fact standard for determining those waters subject to actual use in navigation while quoting with approval the following statement\(^{115}\) of an English law authority with regard to bed ownership and the associated right of fishing:

\[
\text{Fresh rivers, of what kind soever, do of common right, belong to the owners of the soil adjacent, so that the owners of one side,}
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have of common right the propriety of the soil, and consequently the right of fishing [to the center]. . . . [I]f a man be owner of the land on both sides, in common presumption, he is owner of the whole . . . [emphasis added].

Following the *Crenshaw* decision, several cases were decided dealing with ownership of land underlying tidal waters. These cases therefore have no direct applicability to non-tidal waters, but the court in several instances discussed the bed ownership issue in terms of "navigable waters" only without reference to tidal waters. These cases generally support public ownership of the submerged lands involved, and the language of the decisions appears to uphold public ownership of land under all navigable waters. But the value of these cases as precedent in situations involving non-tidal waters is limited by the fact that tidal waters were involved.

The first of these cases, the 1854 decision of *French v. Bankhead*,116 involved the Old Point Comfort area and focused on the issue of the ownership of land between high and low water marks. In discussing a claim that a land grant had conveyed ownership of such land, the court stated that ". . . the navigable waters and the soil under them [are] held by the Commonwealth for the common use, and expressly exempted from grant by the Code. . . ."117

The issue of navigable waterway bed ownership was also addressed in *Norfolk City v. Cooke*.118 The case arose as an action for unlawful entry by the City of Norfolk against the owner of a submerged lot by virtue of a grant from the Commonwealth in 1873. The submerged lot involved was located in a navigable waterway, and the City was the owner of the adjacent upland. The court held that the grant of the lot was void because the state could not grant the bed of a navigable waterway. The court also held that the City had the right to bring an action to prevent use of the beds in question that interfered with its riparian rights to build wharves and piers and have access to navigable water.

*Taylor v. Commonwealth*119 involved land on the York River, title to which could be traced to an English grant. The case does not specifically state that the property in question was located on tidal waters, but the York River is tidal to its head, the confluence of the Pamunkey and Mattaponi rivers at West Point, Virginia. The landowner claimed title in the bed of the York River between the low water mark and the mid-point of the stream. The state had leased a portion of the bed in the contested
area to a water company which operated an artesian well and sold mineral water. The court, in Judge Keith's opinion, held that title to the streambed was in the Commonwealth and not in the riparian landowner. However, the riparian owner had rights of wharfage and access to the river, and the state's title was limited by the commerce clause's navigation servitude and the rights of the citizens of Virginia to fish and travel on the river. The court stated that the Commonwealth could grant portions of streambed which it owned subject to the enumerated limitations.

The 1914 case of *Old Dominion Iron and Nail Co. v. C & O Railway Co.* is one of the few decisions of the Virginia Supreme Court directly involving ownership of the bed of a non-tidal navigable stream. The case involved a controversy between the owner of an island in the James River at a point one mile above the limits of tidal action and another party diverting water upstream of the island. The rights of the owner of the island were based on a land grant from the Crown of England while those of the other party were based on a grant of rights from the state legislature for improving navigation and other purposes, including water supply development. The primary issue concerned the water rights of the respective parties, but streambed ownership was also considered by the court, and later decisions give substantial weight to the court's determinations regarding ownership.

The court in *Old Dominion Iron* was confronted with the claim of the owner of the island that in all rivers navigable in fact where the tide does not ebb and flow, the riparian owners hold title to the bed of the stream and possess normal riparian rights subject only to the public right of navigation. The court did not choose to address this general issue and in the following statement limited its considerations to the specific case before it:

> In our view of this case it is not necessary to discuss or determine the rights of the State in all of her navigable rivers where the tide does not ebb and flow, and we will, therefore, confine our consideration exclusively to the rights of the State in James River above tide and between the termini of the James River and Kanawha Canal.

The decision in *Old Dominion Iron* was not based solely on the general principles of law regarding the rights of riparian owners on non-tidal watercourses navigable in fact, but was also the result of the particular
circumstances of the case. As indicated in the following quotation,\textsuperscript{122} the decision was based more on the long period of time that had elapsed prior to the complaint's being raised rather than on the original existence or nonexistence of the claimed right:

It has been now nearly two hundred years since that grant was made. For more than one hundred and thirty years the James River has been controlled by the State of Virginia under and in accordance with her laws. By numerous statutes and recorded contracts with great works of internal improvement she has, during all that time, repeatedly asserted her right to the navigable waters of the James and the soil under such waters, and has continuously through all of those years exercised her superior right to control and dispose of the same at her discretion. No authority need be cited in support of the conclusion that under such circumstances it is now too late for the appellant to claim that its riparian rights in James River are to be determined by the laws of England as established nearly two hundred years ago, rather than by those of Virginia as they now exist. . . .

If the claim asserted by appellant exists now, it existed one hundred and twenty-five years ago when the State of Virginia granted to the James River Company the right to take from this stream an unlimited amount of water for navigation and for power purposes; and yet appellant and its predecessors in title have stood by in silence throughout that great period of time. . . . If appellant had ever possessed the right it now asserts, a court of equity, under such circumstances of silence and acquiescence in the openly asserted rights of others, would not lend its aid to the destruction of vast property rights and privileges that have become vested on the faith of the State's ownership and control of the waters of James River and its right to dispose of the same in its discretion.

Although the \textit{Old Dominion Iron} case was decided in favor of public ownership of the streambed in question, the case provides no resolution of the general issue of ownership of the beds of non-tidal navigable streams. The court's self-imposed restriction of its considerations to a small portion of the James River and its heavy reliance on the special circumstances that existed in that particular situation lead to the decision's having little value as legal precedent. Perhaps the only general conclusion
to be drawn from the case is that exercise of control over a navigable stream by the state tends to negate private rights asserted at a substantially later time.

Another case that directly concerned ownership of the beds of non-tidal navigable streams was *James River and Kanawha Power Co. v. Old Dominion Iron and Steel Corp.*,¹²³ decided in 1924. The case consisted of an action to establish a boundary line in the same area of the James River involved in the earlier *Old Dominion Iron* case. Unlike the previous case, however, *James River* primarily involved the authority of the state to make direct grants of streambeds themselves rather than the question of bed ownership as an incidence of grants of riparian property. After refusing to decide the question of whether grants of riparian property generally transferred the beds of non-tidal navigable waters into private ownership, the court focused on the power of the state to specifically grant the beds of navigable streams it owned. After reviewing its previous decisions concerning the transfer of land underlying navigable waters to private ownership, the court made the following statement:¹²⁴

> In some of the cases in this and other jurisdictions it has been held that the ownership by the State of the land under navigable waters is in trust for all the people of the State, and that it cannot be aliened.

The court then rejected this view and recognized that beds of navigable streams could be granted in some situations, as indicated in the following quotation:¹²⁵

> Undoubtedly there are certain public uses of navigable waters which the State does not hold in trust for all the public, and of which the State cannot deprive them, such as the right of navigation, but, subject to these public rights, there is no reason why the beds of navigable streams may not be granted unless restrained by the Constitution.

Only one constitutional provision limiting this legislative right to grant streambeds was recognized—that section prohibiting the leasing or selling of natural oyster beds.¹²⁶ It was the court's conclusion, therefore, that the state had the right to grant the bed of any navigable water not considered a natural oyster bed. In the case before the court, the Common-
wealth was viewed as having the right to grant the title to the underwater lands at issue.

After holding the state to have the right to make the grants in question, however, the court proceeded to question the legislatively delegated authority of the land office to have made the grants. Based on an analysis of the act of the General Assembly giving the land office its powers, the court reached the conclusion that the land office could not grant the beds of navigable streams because of an inadequate delegation or authority. Had the General Assembly wished, it could have given the land office such power, but since it had chosen not to, the grants were void, and title to the streambed was still in the state. These considerations were superfluous, however, because the court ultimately decided that its previous decision in Old Dominion Iron was controlling. The court felt bound to follow the previous holding that the streambed was publicly owned because "... any departure from the holding in that case would work confusion and might prove disastrous to large investment made on the faith of it." 129

It is significant that the James River case contains a lengthy statement quoted previously in this report concerning the division of authority in the United States with respect to the bed ownership issue relating to non-tidal navigable waters. The presentation of this statement without comment as to the Virginia position indicates the court's perception in 1924 of a lack of a definitive resolution of the issue in the Commonwealth. The court's treatment of bed ownership in both James River and the earlier Old Dominion Iron reflects the unsettled nature of bed ownership to that time.

Neither do later cases remove the uncertainty. The issue was again addressed in the 1935 decision of Oliver v. City of Richmond, 128 which concerned the right of a riparian landowner to compensation for injury associated with a diversion of streamflow from its natural channel for purposes of improving navigation. As an introductory statement to its discussion of the issues, the court stated that "[t]he James River, where the work is to be done is navigable, and the beds of navigable streams in Virginia belong to the State." 129 Although this statement appears to address the general issue of bed ownership, it is of limited usefulness in resolving the unanswered questions. Since bed ownership was not the primary issue in Oliver, it has little value as precedent. Second, the James at the point in question is subject to tidal influence, thus removing the
stream from the non-tidal but navigable category where the principal uncertainty exists.

A more recent case considering the bed ownership issue is the previously discussed *Boerner* decision. Although the land in question in this case was granted prior to the effective date of the Virginia statute reserving stream-beds in public ownership, bed ownership in this case was not totally dependent on the common law. The fact that the grant specifically included "rivers, waters and water courses" would likely have been adequate to create private ownership without regard to common law concepts based on stream navigability. However, the court, after noting these provisions of the grant, appeared to base its holding in favor of private ownership on a finding of non-navigability. The determination of navigability in *Boerner* was based on consideration of past commercial use and therefore employed the navigability-in-fact standard. The decision therefore appears to give acceptance to the view that beds are private where streams have not been subjected to successful past commercial use and public where such use can be substantiated. But the fact that the land grant in question specifically included streams creates an alternative basis for the court’s holding of private bed ownership and thereby complicates the otherwise seemingly clear position of the court regarding navigability as a determinant of bed ownership.

In addition to this complication, the court, by its language in the opinion, casts doubt on its unqualified acceptance of the navigability-in-fact standard for such determinations. Rather than repudiate the English position that beds of all fresh water streams are privately owned, the court stated that "... the common law of England continues in force ..." except as modified by the General Assembly. Since the stream was not tidal, the English test provided an alternative basis for the court’s finding of non-navigability. Thus, the statement as to the continuance of English law creates at least the possibility that the English navigability standard remains a viable element of law that the court could employ in future decisions. Such application would extend private ownership to a much broader range of waters than would exist under the navigability-in-fact test.

Regardless of this degree of uncertainty, however, the treatment of the bed ownership issue by the Virginia court suggests that, in general, the beds of non-tidal streams navigable on the basis of the commercial-use test are publicly owned. In its most recent cases, the court has relied di-
rectly on evidence concerning the extent of actual navigation in making its determination of bed ownership. In the *Ewell* decision, for example, the court appeared to ignore evidence concerning the existence of tidal action and based its holding of private ownership solely on the absence of substantial commercial use of the waterway in question. And in *Boerner*, the court appeared to consider evidence of the failure of commercial navigation attempts as the proper basis for determining navigability, although its language indicates continued recognition of English law.

There appear to be at least two possible exceptions to the general rule of public ownership of the beds of navigable streams: (1) the situation involving a direct state grant of a specific portion of streambed to an individual, and (2) streambeds associated with property conveyed to private ownership during the colonial period or in the very early history of the state when the provision of English law for private ownership of the beds of non-tidal waters was influential. With regard to the first case, the Virginia Supreme Court has invalidated certain specific grants of the beds of navigable waters in the past, but the latest expression of the court on the subject contained in the *James River* decision indicates that such grants can be made validly. However, the analysis of previous land legislation in *James River* creates doubts as to whether this authority has been effectively implemented. The second situation was at issue in the 1914 *Old Dominion Iron* case. But the court did not resolve the general issue; the case was decided on the basis of specific circumstances involved, especially the fact that a long history of public use and control over the stream in question existed. The impact of early conveyance of land on streambed ownership does not appear to have been resolved independent-ly of these special circumstances. The conclusion that the beds of non-tidal waters navigable-in-fact are publicly owned is consistent with the findings of Embrey in his previously cited 1931 work. However, Embrey’s findings are not based on definitive statements by the Virginia Supreme Court. Fewer court decisions on the subject had been handed down in 1931 than at present (neither the *Ewell* nor the *Boerner* case had been decided). In support of the position of public ownership, Embrey quotes the following provision from a work by John B. Minor:

In Virginia, ...any water is navigable (and therefore public) which is capable of being navigated by vessels employed in commerce (say of 20 tons burden or more), and which communicates with other states or countries, whether the tide ebbs and flows therein or not, and whether connected with the sea or not.
However, cases cited for this proposition do not include any from Virginia but consist primarily of federal decisions. Thus, the position taken by Minor and Embrey was rather speculative in view of then-existing law.

The absence of definitive law on the issue of ownership of the beds of non-tidal waters navigable-in-fact has led other authors to the opposite conclusion from that reached in this report. For example, a 1915 law review article\textsuperscript{136} concluded that the English common law rule of bed ownership by the adjoining riparian owners was in effect. Although development of the law since 1915 has not fully resolved the unanswered questions concerning the bed ownership issue, subsequent judicial treatment as reviewed herein has suggested that private ownership of such streambeds generally has been rejected.
OTHER FACTORS AFFECTING PUBLIC RIGHTS

I. Effect of Established Public Use

The importance of established public use of streams as a potential determinant of public rights under Virginia law has already been noted in one context: the applicability of a 1780 statute reserving certain streambeds from conveyance to private ownership.\textsuperscript{137} The statute originally contained language that appears to limit its applicability to streams used by the general public; thus, the history of public use may be, in some situations, a significant factor in determining streambed ownership and rights of public use.

In addition to the potential significance of public use in determining the scope of this legislation, public use may affect public rights in other ways. The common law recognizes procedures through which property rights can be lost by the original holder and acquired by a second party on the basis of use alone, without the necessity of the usual transaction. Thus, the possibility exists that public rights in Virginia streams that originally did not have legal recognition may now exist due to long-established public use. There are several concepts of property rights transfers based on use, including prescription, implied dedication, and custom.

Prescription is well-established in the law of water use. Its primary application has consisted of disputes between individual parties arising from streamflow alterations.\textsuperscript{138} There are several elements of the prescriptive right necessary for its successful establishment. In a 1973 case involving a right-of-way easement, the Virginia Supreme Court held that to establish a prescriptive right, a use must be "... adverse, under claim of right, exclusive, continuous, uninterrupted, and with the knowledge and acquiescence of the landowner for at least 20 years."\textsuperscript{139} Use in the absence of these conditions is not sufficient to establish a prescriptive right. These requirements are somewhat flexible, however, and must be evaluated in light of each specific situation in which the claim of a prescriptive right arises.

The concept of prescription apparently has not been applied to establish public recreational rights in Virginia streams. A conceptual obstacle to recognition of prescriptive rights in the public is the need for a specific party to assume the property right relinquished by the former owner. The identification of a new title holder poses no problem in the usual...
case where the prescriptive right is acquired by a specific individual but may lead the court to reject the concept of prescription in situations involving the public. There is disagreement among the states as to whether public prescriptive rights are possible, with the majority apparently recognizing public prescriptive rights.\textsuperscript{140}

Implied dedication is a second concept of potential applicability to situations of public use. As the name suggests, the central element here is a dedication of a property interest to the public on the basis of implicit rather than explicit action. This action must be sufficient to establish an intent to dedicate, and the dedication must be "accepted" by the public through actual use. As in the case of prescription, use under permission of the owner is not sufficient to affect title to the property in question. Where public use of property is not adverse to the owner, the court may presume the use to be by permission and reject the concept of implied dedication.\textsuperscript{141}

The doctrine of custom is a third mechanism for recognition of public rights on the basis of use. To be given recognition as a custom, a particular usage must have been a generally accepted practice for a long period of time. Although no specific duration for the establishment of a custom is specified, the time would generally be longer than that necessary for creation of a prescriptive right. This requirement of antiquity has been relied upon as a basis for rejection of custom in the country because of its relatively short history, but some acceptance has been given to the concept in recent years. One example of such acceptance is given by a 1969 decision\textsuperscript{142} of the Supreme Court of Oregon. The court relied upon customary usage as a basis for holding that the public has rights in the dry sand area above high tide line along the Pacific coast.

Since these approaches to the creation of a public right have never been addressed by the Virginia Supreme Court with regard to their potential application to recreational use of streams, no conclusions as to their possible effect can be drawn. However, an important determinant of their ultimate effect with regard to a particular stream is the extent to which a pattern of public use can be documented. Even if one or more of the theories were to be accepted by the Virginia court, established public use would have to be shown in order for any of the theories to have application.
II. Effect of Stream-Stocking

The Virginia Commission of Game and Inland Fisheries (VCGIF) carries out an extensive fish-stocking program in Virginia inland waters. Some stocking activity focuses on the state's impoundments, while others concentrate on streams. With regard to streams, VCGIF's trout-stocking program is its most extensive program. Stocking of trout in streams on private property 143 is a cooperative undertaking based on agreement between VCGIF and the landowner. In order for stocking to be conducted, the owner must enter into the following public fishing agreement 144 with VCGIF:

I, as owner of a section or sections of property in __________ County through which __________ stream flows agree to permit public fishing in the sections of the stream running through my property during the open trout season for the year 19 ____, provided said stream is stocked with trout by the Commission of Game and Inland Fisheries.

Thus, the commitment of the landowner would appear to extend at most to the open season for trout fishing during a one-year period; the existence of a formal agreement with specified terms would likely foreclose consideration of stocking as a factor in the recognition of permanent public rights.

Even in the absence of such limitations, public stocking has not received substantial recognition as a basis for public fishing rights in private waters. 145 However, not all courts have clearly rejected public stocking as a basis for public rights. In a 1943 case, 146 the Supreme Court of Michigan appeared to view public stocking, together with established public use, as a possible source of public rights, as indicated in the following statement:

We cannot overlook the fact that the public has continuously fished upon this property these many years and that it has been stocked with fish by the State of Michigan at a very large expense with the consent of the owners.

The Michigan court apparently disagreed with decisions in other states holding that public stocking does not create a public right. After suggesting this view, however, the court found it unnecessary to base its decision
on these considerations. It instead based its holding in favor of public rights in the stream in question on one of its previous decisions. This earlier case ¹⁴⁷ had recognized broad public rights in any stream with capacity for floating logs, a use to which the stream involved in the later case had been subjected.
SUMMARY AND OUTLOOK

I. Summary of Current Public Rights

The foregoing analysis reveals a complex body of common and statutory law of potential relevance to the issue of public recreational rights. The most direct component of this body of law consists of certain explicit declarations of public rights. These rights exist in at least three forms: (1) statutory enactments protecting public rights of "fishing and fowling" by reserving certain streambeds in public ownership, (2) a decision of the Virginia Supreme Court regarding recreational rights, and (3) a list of public streams prepared by the Virginia Commission of Game and Inland Fisheries.

Statutory protection of public recreational rights by reservation of streambeds in public ownership was originally enacted in 1780 and 1802. The 1780 statute applied to the "eastern parts" of the Commonwealth, a term unofficially interpreted to include all the state except the New River Basin and areas to its west; the 1802 statute extended coverage to the remainder of the state. However, the reservation was apparently restricted by its own terms to waters actually subjected to public use until reference to public use was deleted from the language of the legislation with the publication of revised statutes in 1873. Under this interpretation, the effective date of the statute with regard to waters not being used by the public would have been 1873. The actual extent to which the 1780 and 1802 statutes have reserved streambeds in public ownership cannot be determined readily due to the difficulties of analyzing the large number of grants that were made; however, it appears that much of Virginia lands were granted prior to the effective dates of the statutes, even if the 1780 and 1802 dates are considered. This fact limits the statutory reservation of public ownership as a source of public rights.

The sole case involving public rights in inland waters to be decided by the Virginia Supreme Court (Boerner v. McCallister) held that the public right of fishing by wading does not exist in non-navigable streams whose beds are privately owned. The court noted that fishing rights may not exist in navigable streams having privately owned beds, but this statement does not constitute firm precedent for this position since it was unnecessary to the decision in Boerner.
The third declaration of public rights, the list published by VCGIF, differs from the other two in that it has no independent legal standing. Inclusion on the list does not constitute a legal certainty that a stream or stream segment is public; exclusion does not constitute a conclusive determination of private status. The list is an administrative determination of which streams are public, with historical-use patterns serving as its primary basis. Thus it provides a useful guide but is not a legally enforceable document.

These explicit declarations of public rights are of limited scope and leave many basic issues unresolved; the applicable body of law, therefore, must be considered to include less direct provisions that appear relevant to resolution of unanswered questions concerning the scope of public rights. As indicated in the Boerner decision, the principal factors consist of a stream’s navigability and the ownership of its bed. In some states, navigability alone has been accepted as a legal basis for public recreation use. In other cases, bed ownership is the deciding factor. Of course the two criteria coincide to the extent that navigable streams are considered to have publicly owned beds.

In Virginia, these criteria do not always coincide as a result of two factors. The first consists of the state statute reserving certain streambeds in public ownership. If the statute is applicable (i.e., the land grant was made after its effective date in 1780, 1802, or 1873), the bed is publicly owned without regard to the navigability of the stream. The second factor is that land grants conceivably may encompass specific portions of the beds of navigable streams, either by means of explicit inclusion in a grant of adjacent riparian property or express grants of parcels of land entirely within the bed of a navigable stream. The Virginia Supreme Court has refused on some occasions to recognize grants of submerged lands under tidal waters, but it has subsequently indicated that such grants can be valid. Thus, considerable uncertainty continues to exist with regard to the impact of a grant that purports to include land under navigable waters. Any attempt to determine the existence of such grants would involve analysis of land grant records and the associated difficulties.

Aside from these two special cases, however, it appears that the beds of navigable streams are publicly owned in Virginia. The Virginia Supreme Court has relied consistently on the same navigability standard for determining bed ownership that it has used for resolving the navigability
issue for other purposes. This standard is the susceptibility of a waterway to use as a highway for commerce, with history of past commercial use serving in most instances as the primary evidence of such susceptibility. The court has never fully delineated the impact of the English rule that beds of all non-tidal waters are privately owned on Virginia law, but the court’s consistent application of the commercial-use test suggests that the English test for determining bed ownership has been rejected. Patterns of public usage of the major streams of the Commonwealth indicate general acceptance of the concept of public bed ownership, but this assumption of public ownership is not based on a clear pronouncement in the state’s law. Some uncertainty will continue to exist until the court is required explicitly to address the issue.

If the beds of streams navigable under Virginia’s navigability test are publicly owned, all streams susceptible to commercial use are open to public recreational use. Public bed ownership would largely nullify the effect of the suggestion by the court in Boerner that the public navigation right may not include recreation where streambeds are privately owned. However, the navigability of many streams has not been established officially. This determination may require a court decision in each case where navigability is a controversial issue.

One factor which may become an issue in a court determination of navigability consists of General Assembly actions pertaining to the specific stream under consideration. A substantial number of such measures primarily in the form of declarations of navigability and/or authorizations of navigation improvements have been enacted. At the least, a statutory action of this type would appear to constitute evidence of an early perception that the stream in question was susceptible to navigation. The existence of such legislative provisions would supplement evidence of actual commercial use and therefore would support a finding that the stream is navigable. The impact of such provisions in the absence of corroborating evidence of actual navigational use has not been addressed by the Virginia court.

A court proceedings to determine public recreational rights may involve other considerations in addition to evidence of commercial navigation and the existence of applicable legislative provisions. The party claiming the existence of public rights may attempt to invoke federal or state regulatory jurisdiction (e.g., the U.S. Army Corps of Engineers dredge-and-fill permit program under the Clean Water Act or state legislation pro-
hibiting stream obstruction) in support of public use. Such attempts are likely to be unsuccessful since governmental regulation generally does not create public rights to use the regulated property. The question as to whether public fish-stocking programs create public rights may arise. In general, such activity does not establish a public right to use private property although prohibition of public use will result in termination of stocking. Another factor of possible relevance to a determination of public rights involves the extent of past use. Where a substantial history of such use can be established, the creation of public rights through such mechanisms as prescription, custom, or implied dedication is conceivable. But recognition of public rights created through these means is uncommon and apparently has not occurred in Virginia.

Therefore, it appears that the public right of recreational use currently extends in general to (1) those streams in Virginia that have been used for commercial navigation purposes, and (2) those streams whose beds were reserved in public ownership by the statutes enacted in 1780 and 1802. This position recognizes greater public rights than would exist if the state viewed all beds of non-tidal waters to be in private ownership and held that, as indicated by the Boerner court, that recreation was not part of the navigation right. But the position as to public rights apparently accepted in Virginia is considerably more restrictive than that taken by some states where all waters physically suitable for public use are open to the public. Thus, the existing status of public recreational rights in Virginia represents an intermediate position between the two extremes.

II. Outlook for Future Development

Since public recreational rights in Virginia inland streams are incompletely defined, the course of future development cannot be predicted with a high degree of certainty. In the absence of direct legislative action, future development will rest primarily with the Virginia Supreme Court. Due to the incomplete nature of public rights, the court has considerable flexibility in the position ultimately adopted. It appears that the most likely course of action will consist of a confirmation of the view of public rights delineated in the above summary. The court's previous actions point to this conclusion. Broader views of public rights similar to those taken in other states on the basis of such mechanisms as the public trust doctrine have not been explicitly rejected by the court, but it has given no indication that such views are acceptable.
Since public rights in Virginia's streams have not been recognized to the same extent as has occurred in certain other states, one of the basic questions that arises is whether existing rights can be better defined or perhaps expanded by legislative action. While a statutory enactment appears to be an expeditious course of action, this approach is constrained by constitutional protection of property rights. Courts in other states have nullified legislative action to expand public recreational rights in waters. For example, previous reference was made to a Colorado statute attempting to establish public fishing rights in waters traditionally considered private; it was held invalid by the Colorado Supreme Court on the basis of constitutional considerations.

In Virginia, precedence for legislative attempts to define, and in some cases to expand, public rights in streams exists in the form of early General Assembly declarations of navigability and authorizations of navigation improvements. In one instance, an attempt to enhance public use by requiring the uncompensated removal of a pre-existing dam was held invalid; however, the general issue as to whether simple declaration of public rights constitutes an unlawful taking of property rights has not been resolved by the Virginia Supreme Court. Thus, directly applicable guidelines establishing the limits of legislative action are largely absent.

Although the General Assembly has not enacted a general declaration of public recreational rights, it has declared water to be a public resource. The state's authority with respect to use of water resources has been set forth most explicitly with regard to its power to control consumptive use. State policy in this area provides that "[t]he changing wants and needs of the people of the State may require the water resources of the State to be put to uses beneficial to the public to the extent of which they are reasonably capable...." While to suggest that this provision is a potential basis for public recreational water use would be taking the provision out of context, it does emphasize the changeable nature of the public interest in water and the fact that public uses may require future modification of private rights.

In addition to possible expansions of public recreational rights through state regulatory action based on the public nature of the water resource, it is also possible for such expansion to occur through a program of public acquisition of related property rights. The property interest to be acquired could vary from acquisition of a limited right for the public to float a stream to acquisition of fee title to streambeds and adjacent up-
lands. Of course, such programs would be limited by financial constraints, but selected use of this approach where streams of high recreational value exist merits consideration.

Any effort to expand public rights must be accompanied by consideration of necessary actions to protect landowners from potential abuses related to exercise of public rights. Such occurrences as trespassing on riparian land, littering, and other injury to property can result from uncontrolled use of streams for recreational purposes. Thus, a public recreational management program should encompass a public education effort designed to prevent such problems and other control mechanisms of a regulatory nature for application as needed. Such measures could include limitations on rate of use and enforcement of restrictions or prohibitions concerning certain activities. Regulatory programs of this type are somewhat incompatible with the natural outdoor recreational experience. It is conceivable that actual initiation of such controls may prove to be unnecessary; however, the potential existence of problems requiring such solutions cannot be ignored but must be evaluated as part of the governmental role in recreational management, particularly if state action to expand public recreational rights is under consideration.
FOOTNOTES


4. Id., 1977, ch. 64.

5. Id., ch. 75.


7. Id., 1979, ch. 92.

8. Id., ch. 485.


15. Id. at 279-301.


19. If Embrey's interpretation that all areas of the state draining into the Atlantic are "eastern parts" of the state is accepted, the 1780 statutory date would apply within the James River Basin.


23. Id. at 26.

24. Id. at 25.

25. Id. at 27.

26. Id.

27. U.S. Constitution, article I, sec. 8, cl. 3.
30. Id. at 563.
31. Id.
41. Supra n. 39 at 1344.
43. See Crenshaw v. Slate River Co., 27 Va. (6 Rand.) 271 (1828). The language of the court in this case refers to salt and fresh waters instead of tidal and non-tidal waters. Although the terms are often used interchangeably, in reality the dividing line between salt and fresh water may not coincide with the transition from tidal and non-tidal. For purposes of this report, however, no distinction will be made between the salt/fresh and tidal/non-tidal boundaries.
47. Martin’s Executors v. Commonwealth, 126 Va. 603, 102 S.E. 77 (1920).
51. Crenshaw, supra n. 43.
52. Id. at 289.
54. Id. at 686.
55. Hood v. Murphy, 231 Ala. 408, 165 So. 219 (1936).
57. Id. sec. 13-2-14-2.
60. Id. sec. 62.1-122.
61. Crenshaw, supra n. 43 at 290-91.
64. See, e.g., Home v. Richards, 8 Va. (4 Call.) 441 (1798); Martin v. Beverly, 9 Va. (5 Call.) 444 (1805); Mead v. Haynes, 24 Va. (3 Rand.) 33 (1924). These cases deal with the streambed ownership issue and are discussed later in this report.
69. Id. at 335.
70. The Daniel Ball, supra n. 29.
71. United States v. Appalachian Electric Power Co., supra n. 35.
72. Boerner v. McCallister, supra n. 22.
73. Id. at 26.
74. Federal Power Act, supra n. 33.
75. State Water Control Board v. Hoffman, supra n. 38.
76. Rivers and Harbors Act of 1899, supra n. 32.
78. Supra n. 39.
84. Id. at sec. 735.
85. Diana Shooting Club v. Hustings, 156 Wis. 261, 145 N.W. 816 at 820 (1914).
86. Id. at 818.
89. See, e.g., Herrin v. Sutherland, 74 Mont. 581, 241 P. 328 (1925).
91. Elder, supra n. 88 at 23.
93. Hartman, supra n. 53.
102. Crenshaw, supra n. 43.
103. A Virginia statute (Va. Code Ann. sec. 1-10 (1973)) provides that the common law of England remains in effect in Virginia except as repugnant to the Bill of Rights, the state constitution, or altered by the General Assembly.


106. Boerner, supra n. 22; Mead, supra n. 64.


108. Tiffany, supra n. 83, sec. 661 at 700-01.

109. Home, supra n. 64 at 446.

110. Martin, supra n. 64 at 447.

111. Id. at 446.

112. Mead, supra n. 64.

113. Id. at 36.

114. Crenshaw, supra n. 43.

115. Id. at 288-89.


117. Id. at 169.


120. Old Dominion Iron, supra n. 50.

121. Id. at 109.

122. Id. at 109, 111.

123. James River, supra n. 107.

124. Id. at 346.

125. Id.


127. James River, supra n. 107 at 348.


129. Id. at 541.

130. Boerner, supra n. 22 at 26.

131. Id. at 27.

132. Id. at 26.

133. See, e.g., Norfolk City, supra n. 118.

134. See text at n. 18.


137. See text at n. 18.


140. See Clark, *supra* n. 44 at 225-26.


143. Based on 1978 stocking data, 58 percent of the stream mileage stocked was on private land (letter dated January 19, 1979, from Larry O. Mohn, District Fisheries Biologist, Commission of Game and Inland Fisheries, to William E. Cox).

144. Virginia Commission of Game and Inland Fisheries, "Public Fishing Agreement" (not dated).


149. *Id.* sec 62.1-11(c).
PART II:
Landowners' Perceptions
INTRODUCTION

The perceptions and attitudes of riparian landowners constitute a significant factor in the analysis of public recreation. The incompletely defined nature of the legal rights associated with water-based recreation complicates the relationship between riparian landowners and the public. The resulting misunderstandings have been intensified by federal and state programs for designation of scenic rivers, and as a result, such programs involve substantial controversy.

In order to clarify riparian landowners’ concerns and opinions, a survey was conducted during 1977 on selected stream segments across Virginia. The objectives of the survey were:

1. To describe the socioeconomic and demographic characteristics of riparian landowners;

2. To identify the problems caused by stream recreationists;

3. To determine the extent to which landowners understand the legal foundations regarding recreational use of streams in Virginia;

4. To determine which alternative proposal for public use, if any, was most acceptable to landowners; and

5. To define landowners’ attitudes toward existing recreational use of “their” stream, toward recreational use of Virginia’s streams in general, toward scenic river designation efforts on “their” stream, and toward scenic river designation efforts in general.

Since there are thousands of miles of streams in Virginia, the survey was narrowed to those streams already legislatively designated or “potentially scenic.” At the request of the Commission of Outdoor Recreation, 12 streams designated for possible study by the Commission in 1977 were dropped from the project. This left a total of 19 streams from which to draw the sample. This included 1,436 miles of stream, with 282 miles in the Tidewater region, 512 miles in the Piedmont, and 642 in the mountains. Table 2 and Figure 1 show the location of the reaches inventoried.
### TABLE 2
Sample Streams and Mileage Included

<table>
<thead>
<tr>
<th>Stream</th>
<th>Mileage Included</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tidewater Region</strong></td>
<td></td>
</tr>
<tr>
<td>Blackwater (1)*</td>
<td>39</td>
</tr>
<tr>
<td>Chickahominy (2)</td>
<td>31</td>
</tr>
<tr>
<td>Dragon Run (3)</td>
<td>21</td>
</tr>
<tr>
<td>James (4)</td>
<td>27</td>
</tr>
<tr>
<td>Mattaponi (5)</td>
<td>34</td>
</tr>
<tr>
<td>Meherrin (6)</td>
<td>34</td>
</tr>
<tr>
<td>Pamunkey (7)</td>
<td>96</td>
</tr>
<tr>
<td><strong>Piedmont Region</strong></td>
<td></td>
</tr>
<tr>
<td>Appomattox (8)</td>
<td>87</td>
</tr>
<tr>
<td>Catoctin (9)</td>
<td>16</td>
</tr>
<tr>
<td>Goose Creek (10)</td>
<td>28</td>
</tr>
<tr>
<td>Hazel (11)</td>
<td>5</td>
</tr>
<tr>
<td>James (12)</td>
<td>159</td>
</tr>
<tr>
<td>Meherrin (13)</td>
<td>31</td>
</tr>
<tr>
<td>Rapidan (14)</td>
<td>39</td>
</tr>
<tr>
<td>Rappahannock (15)</td>
<td>29</td>
</tr>
<tr>
<td>Rivanna (16)</td>
<td>26</td>
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<tr>
<td>Staunton (17)</td>
<td>72</td>
</tr>
<tr>
<td>Thornton (18)</td>
<td>20</td>
</tr>
<tr>
<td><strong>Mountain Region</strong></td>
<td></td>
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<tr>
<td>Back (19)</td>
<td>9</td>
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<tr>
<td>Bullpasture (20)</td>
<td>13</td>
</tr>
<tr>
<td>Cedar (21)</td>
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<tr>
<td>Clinch (22)</td>
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<tr>
<td>Cowpasture (23)</td>
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<td>Craig (24)</td>
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<td>Cripple (25)</td>
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<tr>
<td>Maury/Calfpasture (26)</td>
<td>82</td>
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<tr>
<td>New (27)</td>
<td>62</td>
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<tr>
<td>North Fork Holston (28)</td>
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<tr>
<td>North Fork Shenandoah (29)</td>
<td>98</td>
</tr>
<tr>
<td>Passage (30)</td>
<td>16</td>
</tr>
<tr>
<td>Powell (31)</td>
<td>45</td>
</tr>
</tbody>
</table>

*Number in parentheses corresponds to location of stream segment in Figure 1.*
FIGURE 1
Stream Reaches Sampled*

*Numbers correspond to stream segments listed in Table 2.
The sections of streams to be studied were divided into three-mile segments. Thirty-four segments were randomly selected from each of the three geographical regions for a total of 102 segments with 1,129 riparian landowners. The names and addresses were obtained from the property rolls maintained in the tax offices of the various counties involved.

A 12-page mailback questionnaire with a total of 123 questions was developed. Employees of the Commission of Outdoor Recreation, cooperative extension agents, canoeists from various organizations, and local landowners helped to identify questions to be included. An initial questionnaire was pre-tested on 30 riparian landowners along stream sections not included for the study before the final version was completed.

Some 1,129 questionnaires were mailed out, but the final sample was reduced to 995 due to such reasons as insufficient addresses and death of landowners. Of this number, 701 usable questionnaires were returned. This represented an overall response rate of 70 percent, with subtotals of 75 percent from Tidewater, 73 percent from the Piedmont, and 64 percent from the mountain region. The following analysis of riparian landowner characteristics and opinions is based on information in the returned questionnaires. Since checks were not made on non-response bias, it is not known to what extent the non-responding 30 percent of the sample may differ in their characteristics and opinions.
CHARACTERISTICS OF RIPARIAN LANDOWNERS

The majority of riparian landowners are middle-aged or older, with three-quarters between the ages of 40 and 69; the average age is 56. Less than 1 percent of the landowners are under 30, and only 11 percent are under 40 years of age. On the other hand, 17 percent are 70 or older.3

The riparian landowners appear to be settled, long-time residents. The largest percentage (18) of respondents has lived in Virginia 50-59 years, while 79 percent have lived in the state at least 30 years. Only 24 of the 674 respondents are out-of-state residents. If these are excluded, the average number of years residency is 47, only 9 years lower than the average age.

Occupations reported were quite varied. Although much of the riparian land is farmland, farming was not the dominant form of employment; it ranked third behind professional (22 percent) and managerial and administrative employment (19 percent). Thirty-seven percent reported incomes of $25,000 or more. Only 27 percent reported an annual income of less than $10,000. The majority of this group (57 percent) lived in the mountain region.

Nearly three-quarters (71 percent) of the riparian landowners had completed high school and almost half (47 percent) had some college experience. The level of education attained was lower in the mountains and similar in the Piedmont and Tidewater regions.

Land-ownership tenure on riparian lands in Virginia was relatively short, considering the age of the landowners. A majority of the respondents (64 percent) acquired the property between 1960 and 1977, and 82 percent had acquired it since 1950. On the other hand, 40 percent of the properties had been in the family before 1950, and 10 percent of the landowners could trace their family title to a date before the turn of the century.

The principal reason given for acquiring streamfront land was for residential purposes (22 percent). This was followed by inherited land (21 percent), recreation (21 percent), and commercial (including farming, 19 percent). Almost a third of the landowners reported no habitable residence on their property. Of those with houses, two-thirds live on this riparian property permanently and one-third are weekend or seasonal
residents. Permanent residents have lived an average of 24 years on their property, indicative of the settled nature of riparian landowners.
ATTITUDES TOWARD PUBLIC RECREATIONAL USE OF STREAMS

The majority of riparian owners (59 percent) indicated approval of current public use of their stream. Only 16 percent disapproved, with 25 percent neutral or indifferent. Approval of fishing and boating use appears to be associated with landowners' perceptions of their own property rights and the rights of the recreationist.

Some 60 percent of the landowners agreed with the statement, "Recreational boaters should be allowed to use any river in the state," while 40 percent expressed disagreement. Most of the landowners (81 percent) disagreed with the statement, "People who own land along Virginia's rivers are the only ones who should be allowed to use them." Similarly, 73 percent of the landowners disagreed with the statement that they had the right to stop people from using the river as it flowed past their property.

Riparian landowners themselves are river recreationists. Many (72 percent) use their property for fishing and 49 percent report using it for boating. However, only 23 percent of those reporting boating use used canoes, kayaks, or rafts—the rest apparently being motorboaters.
LANDOWNERS' PROBLEMS WITH STREAM RECREATIONISTS

Riparian landowners were given several opportunities in the survey to express any difficulties encountered with recreationists. One question asked them to respond to 20 specific problems ranging from drugs and drunkenness to littering and driving across wet fields. They also were provided an opportunity to mention specific problems they had encountered with river recreationists.

The five problems most often cited were (1) littering, 63 percent; (2) trespassing, 56 percent; (3) vandalism, 43 percent; (4) invasion of privacy, 41 percent; and (5) improper use of guns, 35 percent. An indication of magnitude was gained by asking, "How much does it bother you?" Possible responses included "a lot," "some," and "not at all." The highest readings ("a lot") were for litter (33 percent). In contrast, only 17 percent were bothered a lot by improper use of guns. Drunkenness, drug use, and fires, all problems frequently encountered by public park administrators, ranked far down on the list as reported by riparian landowners. Of the 20 potential problems, drunkenness was twelfth (22 percent of the respondents rated it as a problem); fires were seventeenth (14 percent rated this as a problem); and drug use was nineteenth (11 percent saw this as a problem).

Another section of the survey gave landowners the opportunity to express their agreement or disagreement with 24 statements concerning recreational boating. Seven out of 10 agreed that "Personally, I have had no trouble with recreational boaters." Only 26 percent knew people along the river who said they had had trouble with recreational boaters. Nearly two-thirds (61 percent) of the landowners agreed that most recreational boaters are considerate people, and 43 percent reported "having some nice talks with the recreational boaters using the river near my land."

As positive as these indications are, they are only that—indications. The "bottom line" is given by the frequency of "No Trespassing" signs. In response to a question of whether land had been posted to keep river users from crossing their property, 59 percent of the landowners said they had not, while 37 percent had put up "No Trespassing" signs. Two landowners said they intended to put up signs in the future. This rate is more than might have been expected on the basis of frequency and magnitude of problems reported, but it is still quite low.
It is apparent that problems encountered by landowners are centered on litter and trespassing and are not of a serious magnitude. The attitude of riparian landowners toward river recreationists in Virginia is generally positive, and the majority of landowners have not found it necessary to post their land.
LANDOWNERS' CONCEPT OF NAVIGABILITY

As might be expected, there is some confusion among riparian landowners over what navigability means and how it may apply to their river. The questionnaire asked, "Do you think your stretch of the river is navigable?" Seven times out of 10, the landowners' perceptions of navigability matched the legal situation as interpreted by the Virginia Commission of Game and Inland Fisheries in the list discussed previously. Seventy percent of those on streams considered navigable (403 respondents) gave a positive answer to the navigability question, while 69 percent of those with land on streams not considered navigable (159 respondents) gave a negative reply. The 136 responses on streams which had both navigable and non-navigable sections were not included in this analysis of landowners' perceptions.

Later in the questionnaire, landowners were asked to circle the activities to which they thought the public had a legal right. The first was "float river on a boat." This question produced a somewhat different response than the previous questions on navigability. Seventy-seven percent of the landowners on those streams considered navigable thought the public had a right to float the river on a boat. However, 68 percent of the landowners on streams not considered navigable also thought the public had a right to float the river. This high percentage probably reflects the effect of the somewhat restrictive legal definition of navigability in Virginia and the fact that most of the streams surveyed are floatable in the physical sense. Apparently, some riparian landowners perceive a pre-emptive right of the general public to float a river regardless of its official navigability status.

Recognition of the public's right to float a stream showed an apparent inverse relationship to the amount of controversy that preceded the survey. For instance, landowners on the Maury-Calfpasture River, proposed for scenic river designation in 1972, felt it was non-navigable (27 out of 30 responses) and that the public had no legal right to float the stream (19 out of 30). In fact, only the lower 20 miles of the Maury are on the navigable list, while the remainder, including all of the Calfpasture, is not; however, most is floatable by canoe. On the other hand, more than half of the landowners surveyed on the Rappahannock River, proposed as a scenic river in 1974, felt that the public had no right to float it, although this stream has long been accepted as navigable. From these observations, one can draw the conclusion that many landowners are unclear
on the definition of navigability and uncertain as to its application to recreational boating.
LANDOWNERS' CONCEPT OF BED OWNERSHIP

As noted in the previous discussion of public rights, the streambed ownership issue has important implications for public use. In Virginia, it appears that four stream classifications can exist: navigable/public bed; navigable/private bed; non-navigable/public bed; and non-navigable/private bed. The most open classification in terms of public use is navigable/public bed, although the non-navigable/public bed category would also be subject to general public use. The most restrictive is non-navigable/private bed, in which the public has no legally recognized rights. The foregoing analysis of the legal framework has suggested that the public right in the navigable/private bed classification may be limited to navigation (no fishing, hunting, swimming, or wading).

As a possible indicator of streambed ownership, landowners were asked if they felt the public had a right to walk the bottom of the stream as it passes their land. Slightly more than half (53 percent) of the respondents indicated that the public has a right to walk the river bottom, but 39 percent disagreed. The feeling was more strongly negative in the mountain region where the Boerner v. McCallister case was decided against public use of privately owned river bottoms.
ATTITUDES TOWARD SCENIC RIVER DESIGNATION

The Virginia Scenic Rivers Act authorizes the Virginia Commission of Outdoor Recreation to study streams for possible scenic designation and to make recommendations to the Governor and the General Assembly. The questionnaire asked what inclusion of a given river in the scenic river system would mean to landowners. A total of 55 different types of responses were coded from this free-response question. Seventeen of these types were positive—“will increase property values” (22 individual responses); “a good thing” (56 responses); “preservation of river landscape” (21 responses). When viewed as a whole, the 698 responses to the proposition of what might happen if a scenic river were established can be classified as follows: 24 percent were positive, 25 percent were negative, 23 percent were non-committal, and 28 percent did not answer the question.
Identification, preservation, and protection of streams which possess natural beauty of high quality are the fundamental objectives of the Virginia Scenic Rivers Act. Provisions for public access are not addressed specifically but are implied in references to use. Past experience suggests that the less restrictive provisions in a bill to establish a scenic river, the greater the likelihood of passage. For example, the first scenic river, the Rivanna, was given legislative approval in 1975. In this situation, three boat access points were already in place, and no additional sites had to be purchased. No acquisition of scenic easements was proposed because the country had a floodplain zoning ordinance which limited construction on riverfront lands. About all the proposal did was to declare the stretch scenic and to prohibit construction of dams. Nevertheless, the bill was contested, although it was enacted into law.

If the seemingly positive response toward public recreational use of streams revealed in the survey is considered together with the limited scope of the proposal, the question arises as to the source of the opposition. Perhaps an indication of the answer is given in the responses to the questions on land use and governmental control. Half of the landowners agreed that the state should concern itself with how people use their land, while the other half said it should not. The statement, “The use of land should be determined by the person or persons who own it,” drew a positive response (81 percent). However, two following statements on governmental responsibility to protect free-flowing rivers and scenic values of riparian lands also drew positive replies of 80 percent and 66 percent, respectively.

How is the government to accomplish missions of scenic river protection without impinging on the property rights of riparian landowners short of outright purchase of the land? Perhaps the answer lies in the purchase or donation of a scenic easement, or the levying of a permit for public use. All of these have the potential of being initiated by the landowner, possibly on his own terms and to his advantage.

Varying degrees of disinterest were revealed with regard to four propositions for increased public use: sale of easement, donation of easement in exchange for a tax advantage, fee permits, and sale of fee title. Most riparian landowners clearly want to keep their land. Asked if they would sell to a state agency, 18 respondents were extremely interested, 9 were
very interested, 53 had some interest, 41 were not very interested, and 505 were not at all interested (72 percent). Similar responses were registered for both sale and/or donation of scenic easement (72 percent not interested in both categories). There was an equal lack of enthusiasm in public access through a fee permit (71 percent).

None of the above alternatives for public access drew a positive response, although at least a quarter of the landowners showed some degree of interest. This response is in accord with a general dislike expressed for any governmental controls on private land. Yet there is also apparent recognition of the need for governmental programs for providing public access to, and protecting the beauty of, scenic, free-flowing rivers.
SUMMARY

Due at least in part to the incomplete nature of applicable law, riparian landowner attitudes regarding public rights reflect considerable confusion; but certain aspects of these attitudes toward river recreation are quite positive. The survey indicated considerable sympathy for the concept of public river recreation and recognized a governmental responsibility to provide it. Three-fourths of the landowners endorse scenic rivers in general, and over two-thirds advocate state protection of their river. Only 16 percent disapprove of public recreational use. In fact, landowner perceptions of public rights may be broader than the extent to which these rights have been legally recognized in Virginia to date. The survey did not, however, reveal a generally acceptable means for increasing public use and implementing a more comprehensive scenic rivers program. Although riparian landowners apparently view water as a public resource and have not had serious problems with recreationists, any proposal for increased governmental control is likely to be viewed as an infringement on private property rights. Thus, any attempt to expand public rights must be designed to keep such infringement to a minimum, and the impact of any institutional change on property rights will have to be fully delineated in order for it to gain acceptance.
FOOTNOTES

1. Pursuant to the Virginia Scenic Rivers Act, *supra* n. 1, Part I.
4. *Supra* n. 1.
APPENDIX
Individual Streams Subject to General Assembly
Enactments Concerning Navigation
(Listed in Reverse Chronological Order)

1. Stony Creek and Staunton’s Creek: Declaration that Stony Creek and Staunton’s Creek from the main road at Hagan’s Sulphur Spring to its mouth, in the county of Scott, are both public highways for purpose of floating loose logs, rafts, and lumber (1887 Va. Acts (Special Session), ch. 411, p. 520).


10. Craigs Creek: Authorization for improving stream in county of Botetourt from its mouth to the mouth of Roaring Run; to be suitable for the passage of batteaux (1839 Va. Acts, ch. 139, p. 97).


12. South River and North River: Declaration that South River from its confluence with the North River near Port Republic in Rockingham County to the town of Waynesboro in Augusta County and North River from its confluence with South River are public highways (831 Va. Acts, ch. 164, p. 252).

13. Nansemond River: Authorization for constructing a navigable canal from Nansemond River to Somerton Creek and a canal from Nansemond River to the waters of Roanoke or Chowan River or between the rivers and any other water courses intermediate between any of them (1828-1829 Va. Acts, ch. 76, p. 58).

14. Dragon Swamp: Authorization for opening and improving the navigation from Tidewater as far up as practicable so as to have sufficient depth of water to navigate boats, batteaux, or canoes (1828-1829 Va. Acts, ch. 81, p. 66).


18. Middle River and North River: Declaration that the Middle River in Augusta County from the Crossing of the road leading from Staunton to Winchester at Colonel Allen's to its mouth, and the North River from the mouth of said Middle River to its confluence with the South River at Port Republic in Rockingham County are public highways (1823 Va. Acts, ch. 44, p. 58).

19. Pamunkey, South, and North Anna Rivers: Authorization for improving navigation. "... Brockman's bridge, between the counties of Louisa and Orange, on the North Anna river, and Munford's bridge, in the neighborhood of the Green Springs, in Louisa, over the South Anna River, shall be deemed and taken to be the highest practicable points of navigation on the said rivers. ..." (1821 Va. Acts, ch. 48, p. 39).


25. Goosecreek Canal: Authorization for constructing a canal to unite the waters of Goose Creek in Loudoun County with the waters of
Hunting Creek in Fairfax County. Canal will be deemed to be navigable as a public highway (1816-1817 Va. Acts, ch. 49, p. 96).


27. Elizabeth River: Authorization for constructing a canal from the port of Norfolk through the eastern branch of Elizabeth River to the channel of Currituck Sound ((1813 Va. Acts, December Session), listed in Appendix 5, 1819 Code of Virginia, ch. 38).


29. Buffaloe River: Declaration that stream is to be declared a public highway from its entrance into the Appomattox River to Samuel Carter’s mill in Prince Edward County upon pronouncement of navigability by two special commissioners (1812 Va. Acts, ch. 35).

30. Clinch River: Declaration that the river is a public highway from the junction of the Maiden Springs and North Fork to the Tennessee state line (3 Shep. 221 (1806)).

31. Powell’s River: Declaration that the river is a public highway from Spencer’s Mill to the Tennessee state line (3 Shep. 192 (1805)).

32. Hardware River: Authorization for improving and extending navigation from the river’s fork to its junction with James River in sufficient depth and width for boats capable of carrying 10 hogsheads of tobacco (3 Shep. 68 (1804)).

33. Holstein River: Authorization of a joint project with the state of Tennessee to open navigation from within Virginia (no specific point identified) to the Virginia-Tennessee boundary and ultimately to the Tennessee River (3 Shep. 110 (1804)).

34. Shenandoah River: Authorization for the opening of navigation of the river, including the north branch up to the mouth of Smith’s
Creek in Shenandoah County and the south branch up to a place called Cathrae’s in Rockingham County (2 Shep. 356 (1802)).

35. Quantico Creek: Authorization for improving the navigation of Quantico Creek in Prince William County. The creek “. . . as far as the termination of tide water, shall forever be esteemed and taken to be navigable as a public highway . . .” (1 Shep. 394 (1795)).

36. Piankitank River: Authorization for extending and improving the navigation of the river “. . . and that part of the waters thereof, commonly called the Dragon swamp, to the highest part practicable . . .” to provide navigable capacity for carrying four hogsheads of tobacco (1 Shep. 399 (1795)).

37. Appomattox River: Authorization for extending navigation from Banister’s mills to the highest point practicable to provide “. . . a sufficient depth and width of water to navigate boats, batteaus or canoes capable of carrying eight hogsheads of tobacco” (1 Shep. 390 (1795)).

38. Slate River: Authorization for clearing and extending navigation from stream’s mouth as far as the court house of the county (Buckingham) (1 Shep. 328 (1794)).

39. Banister River: Authorization for extending the navigation “. . . from its confluence with Dan river up to McDaniel’s mill . . .” (13 Hen. 278 (1791)).

40. Blackwater River: Authorization for the counties of Southampton and Isle of Wight to appoint surveyors to supervise the opening of navigation from Little Town to Broadwater bridge (13 Hen. 203 (1790)).

41. Rappahannock River: Authorization for extending the navigation from the “. . . most convenient place on tide water upwards to the highest parts practicable on the main branch and other branches thereof. . . .” It is provided that “. . . the said river and the branches thereof, and the works to be erected thereon in virtue of this act, when completed, shall forever thereafter, be esteemed and taken to be navigable as a public highway . . .” (1 Shep. 244 (1793)).
42. Roanoke River: Authorization for extending the navigation "... upwards of Dan and Staunton rivers, and up the said rivers Staunton and Dan to the heads thereof..." (13 Hen. 193 (1790)).

43. Pamunkey River: Authorization for extending the navigation "... to the highest part practicable ..." (13 Hen. 73 (1789)).

44. Willis’s River: Authorization for extending the navigation up to the Fork-Plantation in Cumberland County "... so as to have a sufficient depth, and width of water to navigate boats, batteaus, or canoes capable of carrying four hogsheads of tobacco" (12 Hen. 586 (1787)).

45. Chickahominy River: Authorization for clearing and extending the navigation as far up as the Meadow Bridges (12 Hen. 382 (1786)).

46. James River: Authorization for clearing and improving navigation from tidewater upwards to the highest parts practicable on the main branch thereon. "... [T]he said river, and the works to be erected thereon in virtue of this act, when completed, shall forever thereafter, be esteemed and taken to be navigable as a public highway" (11 Hen. 450 (1784)).

47. Mattaponi River: Requirement for landowners to remove obstructions after restoral of navigability. Note is taken of previous success in extension of navigation to Burk’s bridge in Caroline County and the resulting commercial activity (11 Hen. 530 (1784)).

48. Potomac River: Authorization for opening and extending the navigation of "Potowmack" River from tide water to highest place practicable on North Branch. River, when works completed, will be taken to be navigable as a public highway (11 Hen. 510 (1784)).

49. Summerton Creek: Authorization for Lemuel Riddick, at his own expense, to make the creek navigable for small craft from the North Carolina line to his property in Nansemond county (7 Hen. 154 (1757)).

50. Fluvanna River: Appropriation of 100 pounds from the treasury of the Colony for clearing the river of rocks posing hazards to navigation. The usefulness of the river for transporting tobacco and other things is noted (5 Hen. 377 (1745)).
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