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**IN THE COURT OF COMMON PLEAS  
HUNTINGDON COUNTY, PENNSYLVANIA  
CIVIL DIVISION**

**COMMONWEALTH OF PENNSYLVANIA,  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION, DEPARTMENT OF  
CONSERVATION AND NATURAL  
RESOURCES, PENNSYLVANIA FISH AND  
BOAT COMMISSION,**

**Plaintiffs**

**v.**

**CONNIE L. ESPY, t/d/b/a CAMP ESPY FARMS,  
DONALD L. BEAVER, JR., HIDDEN HOLLOW  
ENTERPRISES, INC., t/d/b/a PARADISE  
OUTFITTERS, LEGACY CONSERVATION  
GROUP, LLC, t/d/b/a SPRING RIDGE CLUB,  
ANGLING FANTASIES, LLC, AND BELLWOOD-  
ANTIS ENTERPRISES, INC.**

**Defendants**

**No. 2003-781**

**COMMONWEALTH'S MEMORANDUM OF LAW**

The Commonwealth of Pennsylvania, Department of Environmental Protection (DEP), Department of Conservation and Natural Resources (DCNR), and the Pennsylvania Fish and Boat Commission (PFBC) (collectively "Plaintiffs" or "Commonwealth Agencies"), by and through their undersigned counsel, hereby file this Memorandum of Law in the above-captioned matter.

**INTRODUCTION**

**Commonwealth Agencies' Interest in this Matter**

In Pennsylvania, the beds of rivers that are navigable in law or navigable in fact historically are owned by the Commonwealth. These "submerged lands" of the Commonwealth

are imbued with the “public trust,” and must be conserved and maintained for the benefit of all the citizens of Pennsylvania. Commonwealth owned submerged lands are among the “public natural resources” that the Plaintiffs - DEP, DCNR and PFBC - as trustees, are constitutionally mandated to “conserve and maintain for the benefit of all the people.” Pa. Const. Art. I, § 27. The public’s rights in Commonwealth owned submerged lands include the right to fish, boat, wade and recreate.

The Little Juniata River historically has been treated by the Commonwealth government as a navigable water held in trust for the benefit of the public, for which title to the riverbed has always been in the Commonwealth. Prior to 1992, the public’s rights and landowners’ riparian interests in the disputed 1.3-mile section of the Little Juniata River coexisted peacefully. However, for the ten years preceding the filing of the Commonwealth’s Complaint in this matter and with increasing frequency immediately prior to the filing, Defendants, their employees and their agents verbally and physically harassed members of the public seeking to lawfully use this 1.3-mile section of the river. Defendants are various individuals, corporations, associations and/or clubs associated with the operation of a private, for-profit fly-fishing guiding business located on riparian property along the Little Juniata River at Spruce Creek.

Despite receipt of notice from the Plaintiffs of the longstanding status of the Little Juniata River as a public navigable water and the Commonwealth’s claim of title to the riverbed, Defendants, their employees and their agents, in the Spring of 2003, hung cables with signs at the upstream and downstream ends of the 1.3-mile section in dispute and posted other signs on the riverbanks warning the public not to trespass.

The Commonwealth Agencies, after review and consideration of the unusual volume and intensity of complaints and escalating level of interference, concluded that the actions of the

Defendants in effect constituted an unlawful appropriation of public land for private use and private gain. The Plaintiffs thereafter filed the instant Complaint to protect and uphold the public's right to fish, boat and recreate on the Little Juniata River, a navigable river, and to enjoin violations of the Commonwealth's navigation servitude, the Dam Safety and Encroachments Act and the Fish and Boat Code.

### **Commonwealth Agencies**

DEP is the executive agency of the Commonwealth with the power to administer and enforce, *inter alia*, the Dam Safety and Encroachments Act (Dam Safety Act), Act of November 26, 1978, P.L. 1375, *as amended*, 32 P.S. §§ 693.1 – 693.27; Section 514 of the Administrative Code of 1929 (Administrative Code), Act of April 9, 1929, P.L. 177, *as amended*, 71 P.S. § 194; and the rules and regulations promulgated thereunder at 25 Pa. Code Chapter 105. DEP is a trustee of the Commonwealth's natural resources under Article I, § 27 of the Pennsylvania Constitution.

Section 6 of the Dam Safety Act requires a permit from DEP for the construction, operation and maintenance of all dams, water obstructions and encroachments located in, along, across or projecting into *any* water of the Commonwealth. 32 P.S. § 693.6. (N.T.6/12/06 at 29, 38-41).<sup>1</sup> Section 15 of the Dam Safety Act implements Art. I, Section 27 of the Pennsylvania Constitution and the Public Trust Doctrine with regard Commonwealth submerged lands and designates DEP as the executive agency charged with administering the submerged lands program thereunder. (N.T. 6/12/06 at 20); 32 P.S. § 693.15. When a dam, water obstruction or encroachment is located in, along, across or projecting into a submerged land of the Commonwealth “in any navigable lake or river or stream declared a public highway” the

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<sup>1</sup> References to the trial transcript are denoted as (N.T. (date) at (page)). References to the Commonwealth Agencies' exhibits are denoted as (Cw. Ex. \_\_), and references to Defendants' exhibits as (Def. Ex. ).

permittee must also obtain an “easement, right-of-way, license or lease” from DEP. 32 P.S. § 693.15. (N.T. 6/12/06 at 20-21, 29, 40-42).

Under the authority of Section 15 of the Dam Safety Act and the regulations thereunder, DEP is authorized to issue a “Submerged Lands License” for any project less than 25 acres in size, which meets the public trust purposes set forth in the statute and regulations. Licensees must pay an annual fee – akin to rental payments - as compensation to the Commonwealth for use of these lands. Licensees’ use and occupation of such lands are subject to the terms and conditions set forth in the “Submerged Lands License Agreement.” Submerged Lands License Agreements are approved by the Governor. 32 P.S. § 693.15. (N.T. 6/12/06 at 33-36).

DCNR’s involvement in this matter is two-fold. First, DCNR is the executive agency of this Commonwealth created by the Conservation and Natural Resources Act, Act of June 28, 1995, P.L. 89, No. 18, 71 P.S. § 1340.101 *et seq.*, and is charged with the duty and authority to conserve, maintain and hold title to and administer public parks and forest lands for the use and benefit of all Pennsylvania citizens. DCNR also is charged with the duty of assuring that Pennsylvania’s navigable rivers, including the Little Juniata River, are conserved and maintained for the benefit of all the current and future citizens of Pennsylvania, and is one of several state agencies empowered to act as an advocate for Pennsylvania’s rivers as natural resources for its citizens. DCNR also is the lead agency in the Interagency River Island Task Force consisting of DCNR, the Pennsylvania Game Commission and PFBC, established to coordinate the implementation of Executive Order 1990-7 (revised) that deals with islands in Pennsylvania’s rivers that were never patented into private ownership.

DCNR’s second interest in this matter is as a landowner. DCNR owns approximately 2.2 million acres of land within the Commonwealth, administered by the Bureau of State Parks and

the Bureau of Forestry. (N.T. 6/14/06 at 11). The Bureau of Forestry administers the Rothrock State Forest in Huntingdon County with part of that acreage bordering on the Little Juniata River in the 1.3-miles at issue. (Cw. Ex. 32 and 33).

The PFBC is the state agency with responsibility to enforce the Fish and Boat Code, Act of October 16, 1980, P.L. 996, 30 Pa. C.S. §§ 101-7314. The statutory mission of the PFBC includes encouraging, promoting and developing fishing interests and recreational boating in the Commonwealth. 30 Pa. C.S. § 321. As a part of its mission, the PFBC acts on behalf of anglers and boaters to preserve public access to waters and protect the public's rights pertaining to fishing and boating.

### **PROCEDURAL HISTORY**

The Commonwealth Agencies commenced the instant matter in June, 2003 with the filing of a Complaint in Equity and for Declaratory Judgment. The Complaint consists of five counts. Count I seeks a declaration by this Court that the Little Juniata River is a navigable river, that the lands below the ordinary low water mark are submerged lands owned by the Commonwealth, and that the public has the right of use and enjoyment of the river, including the right to fish, boat, wade and recreate. Count II requests that this Court enjoin Defendants and their agents and employees from interfering with the public's rights in the Little Juniata River. Count III requests that this Court enjoin Defendants from interfering with the navigation servitude in the Little Juniata River. Count IV requests that this Court enjoin Defendants' violations of the Dam Safety Act, and the regulations promulgated thereunder at 25 Pa. Code Chapter 105. Count V requests that this Court enjoin Defendants' violations of the Fish and Boat Code.

Defendants filed Preliminary Objections that were briefed and argued before this Court. By Order dated January 13, 2004, this Court denied Defendants' Preliminary Objections.

Defendants filed an Answer to the Commonwealth's Complaint with New Matter to which the Commonwealth Agencies filed an Answer. Trial was held June 12 through June 16, 2006. By Order dated September 21, 2006, this Court directed the parties to file proposed findings of fact and conclusions of law along with a memorandum in support not later than November 30, 2006. This Memorandum accompanies the Commonwealth Agencies' Proposed Findings of Fact and Conclusions of Law in accord with this Court's Order.

### **SUMMARY OF THE ISSUE BEFORE THE COURT**

The primary issue before the Court is whether the bed of the Little Juniata River is owned by the Commonwealth. In Pennsylvania, such "submerged lands" owned by the Commonwealth are held in trust for the benefit of the public. Owners of land along banks of such waters do not have the exclusive right to fish in those waters; that right is vested in the Commonwealth and for the benefit of the public. *Shrunk v. Schuylkill Navigation Co.*, 14 Serg. & Rawle 71 (Pa. 1826).

Commonwealth ownership of submerged lands has always been based upon navigability. Rivers and streams in Pennsylvania are "navigable at law" when they are declared so by the legislature. *Leaf v. Pennsylvania Co.*, 268 Pa. 579, 112 A. 243 (1920). Under *Leaf*, legislative declarations (public highway declarations) are dispositive as to the limits of a grantee's title unless an original land grant was made prior to the date of the declaration. As to grants made prior to the declaration, legislative declaration still is relevant with regard to whether a river or stream is "navigable in fact." *Leaf*. As such, public highway declarations are relevant because they provide a rebuttable presumption of navigability at law and constitute evidence of navigability in fact.

As to navigability in fact, Pennsylvania follows the federal rule: streams and rivers are navigable in fact where they “are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade or travel are or may be conducted in the customary modes of trade and travel on water.” *The Daniel Ball*, 77 U.S. (10. Wall), 557, 563 (1870). Courts employ a historic test of navigability because the public’s right to fish and otherwise use navigable waters vested unequivocally when the country was formed. *Martin v. Waddell*, 41 U.S. 367 (1842). Although the United States Supreme Court has held that title to navigable waters vested in the public at the time of independence, the Pennsylvania Supreme Court has looked back to the time when William Penn was granted the charter to Pennsylvania as the time when title to navigable waters vested in the public. *Carson*. Therefore, navigability in fact must be evaluated through the eyes of the 18<sup>th</sup> and 19<sup>th</sup> century America, prior to the invention of modern day modes of transportation, at a time when the only significant routes of trade, travel and commerce were on waterways.

#### **SUMMARY OF THE COMMONWEALTH’S TESTIMONY**

The Commonwealth Agencies presented the testimony of Cathleen Curran Myers, DEP’s Deputy Secretary for Water Management. Deputy Secretary Myers testified that DEP is the state agency charged with administering the Commonwealth’s submerged lands license program pursuant to Section 15 of the Dam Safety Act, and provided an overview of the DEP’s administration of that program. She also testified that DEP and its predecessor agencies viewed the Little Juniata River as a navigable river, the bed of which is a submerged land owned by the Commonwealth. She further testified that DEP and its predecessor agencies have entered into at least 15 submerged lands license agreements for the Little Juniata River dating from 1958 to the

present, representing the long-standing treatment by the Commonwealth Agencies of the Little Juniata River as a submerged land of the Commonwealth. She further testified that the actions of the Defendants, their employees and agents in stringing the cables with signs across the river violated the Dam Safety Act requirement to obtain a permit for a stream crossing and the requirement to obtain a license from the DEP for occupation of a Commonwealth submerged land.

The Commonwealth Agencies also presented the testimony of Rodger Cook, the Chief of the Land Records Section in the Bureau of Facility Design and Construction in DCNR and a registered surveyor. As part of his duties, Mr. Cook handles all land acquisitions for both the Bureau of Forestry and Bureau of State Parks, including title searches, preparation of deeds, and settlements as required, directing the necessary surveys of state lands and investigating boundary discrepancies. Mr. Cook testified that for purposes of this case, he investigated the Commonwealth's title to the Rothrock State Forest, as well as the old original records at the Pennsylvania Historical Museum Commission (Warrants, Patents, etc.) and the Huntingdon County deed records relative to all those properties involved in the 1.3-mile section of the Little Juniata River at issue. He did not perform complete title searches, only deed and record searches. Based on his research, Mr. Cook created Cw. Ex. 32, a map of the relevant warrants, and Cw. Ex. 33, a corresponding map of the current ownerships along this section of the river. Together, these maps show the original grants and the current ownerships of the lands at issue adjacent to the Little Juniata River in the disputed section. Mr. Cook's testimony supports a finding that the Little Juniata River is navigable in law.

In support of a declaration that the Little Juniata River is a navigable river, the Commonwealth Agencies presented the testimony of Judith A. Heberling, Ph.D., a professional

historian. Dr. Heberling has more than 30 years of professional experience in historical and material culture research, industrial history and a broad range of transportation related endeavors. Dr. Heberling's historical research has focused on 18<sup>th</sup> and 19<sup>th</sup> century central Pennsylvania politics, transportation and manufacturing. Dr. Heberling, along with Michael B. Husband, Ph.D., prepared an expert report in which they concluded that the Little Juniata River was a corridor of commerce for a wide variety of commercial and agricultural products from the latter portions of the 18<sup>th</sup> century to the arrival of the Pennsylvania Railroad in the 1850's. The report is in evidence as Cw. Ex. 52.

Dr. Heberling testified in her professional opinion that the Little Juniata River was used regularly as a commercial highway until the construction of the railroad through the area in the early 1850s. She noted that reports and descriptions of products being carried down the river on arks and rafts came from a wide variety of sources including contemporary newspaper and witness accounts. She further noted that the General Assembly repeatedly passed acts declaring the Little Juniata River a public highway and regulating fishing activities, bridges, and dams that interfered with navigation on the river. Dr. Heberling opined that it is unlikely that multiple statutory declarations of, and references to, navigability would have been issued had not the need for the rivers as part of an internal transportation network been perceived and established. She testified that the legislation was a result of numerous and repeated petitions to the legislature from residents of the interior who were seeking transportation improvements.

Dr. Heberling testified that commercial travel during the 18th and 19th centuries was dependent upon climatic conditions and was uncertain and sometimes irregular. Use of inland rivers was typically intermittent and driven by the harvest and production cycles. She noted that *all* inland rivers, including the Allegheny and Susquehanna Rivers, were potentially hazardous,

especially at flood stage, but people sent boats out anyway because they had no choice. She testified that simply put, travel was difficult in the 18<sup>th</sup> and 19<sup>th</sup> centuries. Dr. Heberling advised that we must be very careful that we do not make assumptions about the past based upon twenty-first-century practices, values, and technology. She testified that in the case of the Little Juniata River, we are discussing people who used the inland rivers as a link in a local transportation network because that is what was available to them. She explained that many of those who ran arks and rafts on the Little Juniata River and other inland rivers were hauling their own products and merchandise to market or to their customers; they were not operating large-scale marine businesses.

Based on her extensive research, Dr. Heberling testified that all of the inland rivers, including the other branches of the Juniata River and the great or principal rivers, such as the Ohio, Allegheny, Monongahela, and Susquehanna - all clearly navigable - experienced problems with rock ledges, boulders, sandbars, and low water flows/levels throughout the 18<sup>th</sup> and 19<sup>th</sup> centuries. She noted that if the inland rivers had been easily navigable both up and downstream in all seasons, there would have been a less urgent need to build an expensive canal system across the state, not to mention the extensive slackwater navigation system constructed on the Allegheny, Monongahela, and Ohio Rivers in the late 19<sup>th</sup> and 20<sup>th</sup> centuries.

Dr. Heberling opined that while it is true that the Little Juniata River has served as a highway for the transportation of people and goods only occasionally *since* the mid-19<sup>th</sup> century, the river's navigability is supported by authentic and reliable historical evidence of regular use during the period before 1850.

Dr. Heberling testified that the Little Juniata River served a rural population that had to contend with impassable roads much of the year and exorbitant cartage fees to get their

agricultural and manufactured products to market. Area farmers and businessmen took advantage of the opportunity to send their flour, whiskey, grain, paper, wool, cloth, linseed oil, and other products more easily and cheaply by arks and rafts from the landings along the Little Juniata River.

Last, the Commonwealth Agencies presented the testimony of Waterways Conservation Officers (“WCO”) Walter Rosser and Craig Garman in support of their claim that the Defendants, their employees and their agents interfered with the public’s right to fish, boat and recreate in the Little Juniata River. WCO Rosser was responsible for patrolling the area in dispute from the mid-1970’s until his retirement in 2000, at which point, WCO Garman assumed those duties from 2000 to the present day. The WCO’s testified that during the 1970’s and 1980’s, the PFBC stocked the Little Juniata River and it developed into a wonderful fishery and was fished heavily. The claims of ownership of the bed of the Little Juniata River and the efforts to interfere with lawful public fishing and boating did not begin until the early 1990’s, starting with Herman Espy, deceased husband of defendant Connie L. Espy, and continuing to the present day with the Defendants. Since 2000, Officer Garman received numerous complaints regarding the disputed section of the Little Juniata River while on patrol or through telephone calls.

**STANDARD FOR GRANTING DECLARATORY AND INJUNCTIVE RELIEF  
AND BURDEN OF PROOF**

“The Declaratory Judgments Act [42 Pa. C.S. §§ 7531-7541] is remedial in nature and its purpose is to provide relief from uncertainty and establish various legal relationships.” *Curtis v. Cleland*, 552 A.2d 316, 318 (Pa. Cmwlth. 1988). “An action for declaratory judgment is available to obtain a declaration of the existing legal rights, duties, or status of the parties where

the declaration will aid in the determination of a genuine, justiciable controversy.” *Warner v. Continental/CNA Insurance Cos.*, 688 A.2d 177, 180 (Pa. Super. 1996). The availability of declaratory relief is not “dependent on whether the law is either settled or unsettled on a particular matter.” *P.J.S. v. Pennsylvania State Ethics Commission*, 669 A.2d 1105, 1109 (Pa. Cmwlth. 1996). Courts should use an action for declaratory judgment “to declare the state of the existing law on a particular issue.” *Id.*

To justify the award of a permanent injunction, the Commonwealth Agencies must establish (1) “that [their] right to relief is clear,” (2) “that an injunction is necessary to avoid an injury that cannot be compensated by damages,” and (3) “that greater injury will result from refusing rather than granting the relief requested.” *Kuznik v. Westmoreland County Board of Commissioners*, 902 A.2d 476, 489 (Pa. 2006) (internal quotations omitted). “A court may not grant injunctive relief where an adequate remedy exists at law.” *Harding v. Stickman*, 823 A.2d 1110, 1111 (Pa. Cmwlth. 2003). It is not necessary for the Commonwealth Agencies “to establish irreparable or immediate harm in order to meet the criteria for a permanent injunction.” *Kuznik*, 902 A.2d at 504.

The Commonwealth Agencies’ evidentiary burden for the relief sought is by a preponderance of the evidence. *See, e.g. State Farm Fire and Casualty Co. v. Levine*, 566 A.2d 318 (Pa. Super. 1989) (relating to declaratory judgment); *Lackey v. Sacoolas*, 411 Pa. 235, 191 A.2d 395 (1963) (relating injunctive relief). A preponderance of the evidence is tantamount to a “more likely than not” standard. *Commonwealth v. \$6,425.00 Seized from Esquilin*, 583 Pa. 544, 555, 880 A.2d 523, 529 (2005). A preponderance is “ ‘the greater weight of the evidence’, i.e., to tip a scale slightly to the criteria or requirement for preponderance of the evidence.” *Karch v. Karch*, 885 A.2d 535, 537 (Pa. Super 2005), *citing Raker v. Raker*, 847 A.2d 720, 724 (Pa.

Super. 2004). The balance of evidence is determined by the relevancy and credibility of the testimony of the witnesses presented. *Sarbiewski v. Sarbiewski*, 193 A. 91 (Pa. Super 1937).

### ARGUMENT

#### **A. The Bed of the Little Juniata River is Owned by the Commonwealth and Is Navigable at Law.**

The question of whether the public has the right to fish, boat and recreate in the 1.3-mile section of the Little Juniata River in dispute is dependent upon the ownership of the bed of the river. If the bed of the river is a submerged land owned by the Commonwealth, it is held in trust for the benefit of the public and the public may not be excluded. Commonwealth ownership of submerged lands is based upon historic navigability at law or in fact. Owners of land along banks of navigable waters in Pennsylvania do not have the exclusive right to fish in those waters; that right is vested in the Commonwealth and for the benefit of the public. *Shrunk*; *Carson v. Blazer*, 2 Binn. 475, 4 Am. Dec. 463 (Pa. 1810); *Lehigh Falls Fishing Club v. Andrejewski*, 735 A.2d 718 (Pa. Super. 1999), *petition for allowance of appeal denied*, 563 Pa. 702, 761 A.2d 550 (2000).

So vital is the public's interest in the beds of its rivers that the Pennsylvania Supreme Court as early as 1810 indicated that title to the beds of all rivers is *presumed* to be held by the Commonwealth. *Carson*. As Justice Brackenridge stated succinctly: "I cannot infer . . . any presumption of an exclusive use of the water, or hereditament of the soil covered with water, but rather the contrary." *Carson*.

To determine the extent of a riparian owner's title versus the Commonwealth's ownership, this Court must examine the original land grant out the Commonwealth from which a riparian owner's title derives. Legislative declarations of navigability, such as public highway

declarations,<sup>2</sup> are dispositive as to the limits of that title unless the original land grant was made prior to the date of the declaration. *Leaf*. In other words, a public highway declaration that predates a grant of land establishes navigability at law. *Id.* As to grants made prior to a declaration, legislative action is still relevant as to whether a stream is navigable in fact. *Id.* See also *McKeen v. Delaware Division Canal Co.*, 49 Pa. 424 (1865); *Lehigh Falls Fishing Club*. Moreover, the common law regarding the relationship of public highway declarations to the Commonwealth's title to the beds of navigable rivers has been codified in the Dam Safety Act, which requires one to obtain a submerged lands license when a dam, water obstruction or encroachment is located in, along, across or projecting into a submerged land of the Commonwealth "in any navigable lake or river or stream declared a public highway." 32 P.S. § 693.15. In the instant case, this Court must therefore look at when title to the property at issue vested in the predecessors in interest of the current owners, including the Defendants, in relation to the dates of the various public highway declarations associated with the Little Juniata River.

#### ***Public Highway Declaration Acts***

As presented at trial, there are three Public Highway Declaration Acts that are relevant. They are: (1) The Act of February 4, 1794 declaring the Little Juniata River a public highway from its mouth to Logan's Narrows (Cw. Ex. 21); (2) the Act of March 26, 1808 extending the declaration from Logan's Narrows to Bells Mills (Cw. Ex. 23); and (3) the Act of April 1, 1822 extending the declaration to the mill dam of Alexander and Daniel Ale (Cw. Ex. 24).<sup>3</sup> With these dates in mind, this Court must examine the ownership of the disputed 1.3-mile section of the Little Juniata River.

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<sup>2</sup> A Public Highway Declaration is an Act passed by the Legislature declaring certain streams or rivers to be public highways for the passage of rafts, boats and other vessels, or to improve navigation. (Cw. Ex. 21, 23-24).

<sup>3</sup> For ease of reference, Cw. Ex. 44 depicts the areas of the Little Juniata River declared to be a public highway under each of these Acts.

### *Warrants, Surveys, Returns of Surveys and Patents*

In order to simplify this task, the Commonwealth Agencies have prepared and attached what is entitled "Commonwealth – Comparison Table of Warrants and Surveys." (Attachment A to this Memorandum). This Table references the Cw. Ex. 1 through 26, previously bound and admitted into evidence, as well as Cw. Ex. 32 (Map of Warrants, Surveys, Return of Surveys and Patents) and Cw. Ex. 33 (Map of Current Ownerships), also admitted into evidence. The Comparison Table sets forth not only the original Warrants, Dates of Survey, Dates of Return of Survey, and Dates of Patent (where available), the relevancy of which is discussed below, but also the current owners of the properties adjacent to the Little Juniata River in the disputed 1.3-mile section. Finally, the Table indicates whether or not any of the public highway declarations predated the Warrant or Return of Survey, which is necessary for the Court to determine whether the Little Juniata River is navigable at law. The Table accurately reflects the Commonwealth's Exhibit Nos. 1 through 33 as introduced and admitted by the Court.

To further aid in the Court's analysis of the current ownerships in the 1.3-mile section of the Little Juniata River in question, the Commonwealth Agencies offer the following background on the law regarding Warrants and Patents in the Commonwealth. The law regarding the acquisition of land by way of warrants, surveys, return of surveys, and patents is settled.

Generally speaking,

The public lands were sold by the state in a manner that is well known to the profession. A person desiring to buy made his 'application' in writing, stating what land he wished, and as nearly as possible where it was located. On receiving this application, a warrant issued from the land office, directed to the proper deputy surveyor, authorizing and requiring him to survey and lay off for the applicant the land applied for. This was taken to the deputy, who went upon the land, made a survey of the tract in obedience to it, and then returned it, with a copy or description of the survey so made, to the land office. When this return was accepted, and the land paid for, the state made its deed, called a 'patent,' conveying the tract to the applicant or his vendee.

*Ferguson v. Bloom*, 144 Pa. 549, 557, 23 A. 49, 49 (1891).

The Warrant issued to the applicant for public lands, upon payment of purchase money, is an authority from the Commonwealth to survey vacant land. *Tryon v. Munson*, 77 Pa. 250 (1875). It is the first document that is needed in order to purchase property owned by the Commonwealth. As noted by the Pennsylvania Supreme Court:

[The warrant] is evidence of a contract between the state and the warrantee, to permit him to elect unappropriated land to be surveyed where he shall designate. Though as a contract or permission, paid for, to elect, it is not subject to an adverse levy, either as land or a chose in action; it confers on the owner of the warrant a power to take land where he shall elect to have it. When the election is consummated by a survey, return and acceptance, the title is consummated, and has the effect of a legal title, the patent being of course.

*Tryon*.

In order to validate their claim to public lands, warrant holders had to have a survey performed pursuant to the warrant and have the survey returned to the Land Office.

When it is said that a precisely descriptive warrant gives title from its date, and a vague one from the time of survey, the qualification is sometimes added and always to be understood, *if it be followed up with reasonable diligence*. Whether descriptive or vague, the warrant imposes on the holder the duty of having it surveyed and returned into the surveyor-general's office in a reasonable time, and his supineness is punished by postponing him to a more diligent, though subsequent, claimant. ... [A] delay for seven years has been accounted ground of a legal presumption of abandonment. ... Payment of purchase-money does not excuse a man from making survey and return of his warrant. ... An applicant is not bound to look beyond the land office; and, although a warrant may be issued, and money paid, yet if there be no return of survey in the office, the title under a junior warrant will be good. If he neglects to see to the return of survey for a longer period than seven years, it is at his own peril. ... A knowledge of a warrant being issued is nothing, for the applicant has a right to act on the assurance arising from a want of a return of survey, that the original warrantee, for some cause, has abandoned his title. ... It is not till he makes return of his survey that the State can know whether she is paid for all the land appropriated, nor what its location and boundaries. ... The payment of purchase-money and office fees does not excuse the want of a survey and return.

*Emery v. Spencer*, 23 Pa. 271, 275-277 (1854) (internal quotations and citations omitted).

The final step in acquiring public lands was the issuance of a patent, which is the “deed of the state to its grantee.” *Bushey v. South Mountain M & I Co.*, 136 Pa. 541, 552, 20 A. 549, \_\_\_ (1890).

The patent conveys the full legal title of the state, and is, as to her, a merger of the previous proceedings, and a waiver of informalities. It is, moreover, full and express notice to every person whatever that the land has been granted away, and is not vacant. The patent is therefore prima facie evidence of title and of survey.

*Id.* (internal quotations and citations omitted).<sup>4</sup>

A warrant is not a deed, and title does not necessarily begin with its issuance, but rather title is perfected by the return of survey and the issuance of the patent. *See Fred E. Young, Inc. v. Brush Mountain Sportsmen’s Ass’n*, 697 A.2d 984, 988 (Pa. Super. 1997) (“the warrant imposes on the holder the duty of having it surveyed and returned to the Surveyor-General’s Office in a reasonable time.”) *See also* N.T. 6/14/06 at 22-24. “A warrant and survey, returned and accepted, on which the purchase-money has been paid, confers a perfect title against all the world but the Commonwealth, which has itself the legal title only as security for the patenting fees.” *Consolidation Coal Co. v. Friedline*, 3 A.2d 200, 201 (Pa. Super. 1938). Much depends on the date of the Return of Survey, in the event there were two warrants for the same property, which might cause an overlap or encroachment (situations with junior and senior warrants) where the earlier survey would generally hold. *See Emery* and N.T. 6/14/06 at 24.

Title also depends not only on when the survey was returned, but if the warrant was a descriptive or a general warrant. A precisely descriptive warrant<sup>5</sup> gives title from its date.

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<sup>4</sup> From time to time a property may have been warranted and surveyed but never patented. This does not necessarily defeat ownership. The Commonwealth currently owns lands in the state forest system that have been warranted but not patented. (N.T. 6/14/06 at 22). Today, in the event a person finds a tract of land which he believes to be unwarranted or unpatented, he has the right to seek title to that property by filing the proper documents with the Commonwealth pursuant to the Vacant and Unimproved Public Lands Act, Act 88 of November 22, 2000, P.L. 652, 68 Pa.C.S. § 6102, *et seq.* This law does not apply to the present action but is presented to advise that a method is still in place to acquire unwarranted or unpatented lands of the Commonwealth.

*Cassidy v. Conway*, 25 Pa. 240, 1 Casey 240 (1855). However, for general warrants where the description is not specific, the title dates from the return of survey.

In the present action, the Commonwealth Agencies have established the current ownerships of the properties in questions along the 1.3-mile section of the Little Juniata River at issue. The Commonwealth Agencies did so through the title work performed by Rodger Cook, which is set forth in Cw. Ex. 32 and 33 (N.T. 6/14/06 at 12-17) and was not disputed by the Defendants (N.T. 6/14/06 at 16), and is reflected in the table attached to this memorandum. The original descriptions and the current ownership of these properties are important in determining the rights of the public to use the river.

***Current Riparian Ownership Interests in the Disputed Section of the River***

In the disputed 1.3 mile section of the river, Connie L. Espy owns the all the property located adjacent to the East/North bank of the Little Juniata River south of Spruce Creek. Cw. Ex. 33.

The Commonwealth of Pennsylvania, DCNR, owns approximately one-half of the property located adjacent to the West/South bank of the Little Juniata River south of Spruce Creek, known and administered as the Rothrock State Forest. Cw. Ex. 2, and 33.

John P. Espy, Jr. and Norfolk Southern Railway Company (Pa. Lines LLC), neither of whom are parties to this action, own the remaining portions of the property located adjacent to

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<sup>5</sup> The Pennsylvania Supreme Court in *Keller v. Powell*, 142 Pa. 96, 21 A.2d 796 (1891), explained:

[With a descriptive warrant,] its boundaries are fully set forth therein. A descriptive warrant gives a right of entry. The warrantee has an equitable title, commencing with the date of the warrant. His title bears a close analogy to that of a vendee under articles of agreement. A descriptive warrant, and payment of part of the purchase money, gives an equitable interest in the land from its date, which can only be divested by conveyance or twenty-one years' adverse possession. When the patent issues, the warrantee becomes possessed of the full legal title, and it relates back to the inception of his equitable title.

*Keller* at 103, 21 A.2d at \_\_\_ (citations omitted).

the West/South bank of the Little Juniata River in the disputed section downstream of Spruce Creek. Cw. Ex. 9-13 and 33. Hidden Hollow Enterprises leases a small portion of the property located adjacent to the West/South bank of the Little Juniata River south of Spruce Creek from Norfolk Southern Railway Company. Cw. Ex. 14 and 33.

To determine title to the land along the disputed 1.3-mile section of the Little Juniata River, these are the five relevant ownerships that must be analyzed. Connie Espy's title to the property along the East/North bank derives from the Peter Young Warrant (Cw. Ex. 3) (letter C on Cw. Ex. 32), and the 25-acre Abraham Sells Warrant (Cw. Ex. 4) (letter D on Cw. Ex. 32). The 100-acre Abraham Sells Warrant (Cw. Ex. 5) does not apply here because it does not border the Little Juniata River (letter E on Comm. Ex. 32). A review of both the Peter Young and the 25-acre Abraham Sells Warrants show that they are general warrants, and not descriptive, because they do not include a specific property description which would obviate the need for a survey. Thus, the date of the Return of Survey is when title began, which in this case is September 5, 1803. As set forth in the attached Table, the Public Highway Declaration of 1794 predates both the Returns of Surveys, thus providing evidence the Little Juniata River is navigable at law.

The Commonwealth's property known as the Rothrock State Forest derived from the Ann Brown Warrant (letter B on Cw. Ex. 32). Unfortunately, a copy of that Warrant was not available, but it is referenced in the Return of Survey as March 5, 1794. The Public Highway Declaration, Act of February 5, 1794 (Cw. Ex. 21), also predates this Warrant and the Return of Survey, thus providing further evidence the Little Juniata River is navigable at law.

John Espy's title and Norfolk Southern Railway Company's title to property adjacent to the West-South bank of the Little Juniata River traces back to the Honorable Proprietaries

Warrant. However, there is no evidence of record that a patent was issued for these parcels. Again, the only document available at the Pennsylvania Historical and Museum Commission was a copy of the Proprietaries' Return of Survey, which only referenced the date of the Warrant (Cw. Ex.8).

While none of the Public Highway Declarations predated this Proprietaries Warrant, the relevant date for the vesting of these titles is unknown. At the time of the formation of the Commonwealth after the Revolution, all general Proprietary Manors held by the Proprietaries reverted to Commonwealth ownership by law for further warranting by the Commonwealth unless the property was held as a private estate. *Hublely v. Vanhorne*, 7 Serg. & Rawle, 185, 188-192 (1821). (N.T. 6/12/06 at 120). There was no evidence presented in this case to define further the ownership of this Proprietaries tract, i.e., if it reverted to the Commonwealth pursuant to the law or if an additional survey was done or a patent was issued. Thus, it is impossible to determine whether or not the 1794 Public Highway Declaration predates or postdates the relevant vesting of title of the Proprietaries Warrant, portions of which are now owned by John Espy and Norfolk Southern Railway Company. Further, there is no evidence in the record that demonstrates either owner of these properties claims ownership of the bed of the Little Juniata River.<sup>6</sup>

Hidden Hollow Enterprises leases a small portion of land (0.6 acres) adjacent to the Little Juniata River, but the ownership remains with Norfolk Southern Railway Company. The lease is limited to the "purpose of general beautification and security and for no other purpose" and is

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<sup>6</sup> The Defendants made averments as New Matter in this case regarding the title and ownership rights of the bed of the Little Juniata River (Answer and New Matter of Defendants, ¶¶ 120-121, 126-131). However, Defendants have not presented any evidence that Norfolk Southern or John Espy claims ownership of the bed of the Little Juniata River. The burden of proof for New Matter is on the Defendants who have failed to meet their burden. *See, e.g., Appeal of Shea*, 121 Pa. 302, 316, 15 A. 629, 632 (1888); *City of Wilkes-Barre v. Kaminski Bros.*, 804 A.2d 89, 94 n. 9 (Pa. Cmwlth. 2002); *Birdsboro Municipal Authority v. Reading Co. and Wilmington & Northern R.R.*, 758 A.2d 222, 225-226 (Pa. Super. 2000).

limited by its terms to the riparian land owned by the Lessor, Norfolk Southern Railway Company, “along the low water line.” (Cw. Ex. 14, letter I of Cw. Ex. 33). The interest of Hidden Hollow Enterprises granted through this lease is not sufficient for Hidden Hollow or any of the Defendants to assert control or make a claim over the bed of the Little Juniata River.

In summary, the property owned and controlled by Plaintiff DCNR and the Defendants through Connie Espy was surveyed and patented *after* the Public Highway Declaration of February 1794. The property owned and controlled by John Espy and Norfolk Southern was surveyed, but no patent was issued. More importantly, there is no evidence in the record that Defendants own this property or that the owners of this property make any assertion of ownership to the bed of the Little Juniata River. The lease between Norfolk Southern and Defendant Hidden Hollow Enterprises does not grant any interest sufficient to assert control over the Little Juniata River. Based upon this evidence, the bed of the Little Juniata River is owned by the Commonwealth.

#### ***Other Indicia of Commonwealth Ownership***

The law is well settled that deeds speak for themselves and their construction cannot be varied or changed by parol. *Meyers v. Robinson*, 74 Pa. 269 (1874). Thus, a review of the metes and bounds description in the original Warrants, Return of Surveys as well as the current deeds, provide further evidence as to ownership along the Little Juniata River. In this regard, the Commonwealth Agencies contend that the descriptions in the original Warrants, Surveys, Return of Surveys and Patents set forth the official description of the relevant properties in this matter and that it is unnecessary to analyze the descriptions in all deeds or documents in the chain of title other than the original Warrants, Return of Surveys and Patents together with the current

ownership deeds in order to determine the original and current descriptions of the relevant properties in this matter.

A review of the documents identified in the Comparison Table attached to this memorandum shows that all relevant Warrants, Surveys, Returns of Survey and Patents identified therein describe the properties by metes and bounds as being along the bank of the Little Juniata River or situate on a particular side of the Little Juniata River (or down the "Little Juniata Creek" to a point on the River and "between Little Juniata River and Carrawe Mountain" as in the Proprietaries Warrant). (Cw. Ex. 1, 3 – 5, 8.) Furthermore, all relevant deeds identified in the Comparison Table describe the currently owned properties by metes and bounds as being along the bank of the Little Juniata River, to a post on the Little Juniata River, or to or along the low water mark or water line of the Little Juniata River. (Cw. Ex. 2, 6, 7, 9, 13). No description in any title document states that title goes to the center of the Little Juniata River.

The description of the land going only to the bank of a river was quite common and was not determinative as to whether or not a particular river was navigable. Other evidence as to navigability is necessary. If the river was determined to be non-navigable, ownership went to the middle of the stream:

It is no doubt the settled law of this state that a grant of land bordering on a nonnavigable or private stream extends ad filum medium aquae. The conveyance to such grantee by one who owns the land adjacent to and under the stream carries the grantee's title beyond the water line of the stream and gives him the ownership of the soil to the middle of the current. This is grounded on the presumption that such was the intention of the parties to the grant.

*Smoulter v. Boyd*, 209 Pa. 146, 150, 58 A. 144, 146 (1904).

Title to property along navigable rivers is limited to the low-water mark, but the absolute title of the riparian owner is fixed at the high water line. The area between the high and low

water line is an easement in favor of the public. The Pennsylvania Supreme Court in *Stover v. Jack*, 60 Pa. 339 (1869) (citations omitted), explained:

[T]he grant of the state of lands bordering on navigable streams, even when calling for the river as a boundary, do not extend beyond low-water mark. And even to this extent the grant of title is not absolute, except to high-water mark. As to the intervening space between high and low water mark, the title of the private owner is qualified. The right of passage over it in high water remains in the public. The state may use it for purposes connected with the navigation of the stream without compensation, and may protect it also from an unauthorized use of it even by the owner of the land to low-water mark.

Since all the metes and bounds descriptions in the Warrants, Return of Surveys, Patents, and deeds, cite to the low-water mark or line, or along the Little Juniata River itself, whether or not the private landowners or the Commonwealth own to the center is determined by whether or not the river is navigable in fact.

Further, it should be emphasized that Defendants are able to claim at most title in land immediately adjacent the river on only the East/North bank, since the riparian land on West/South bank of the section in dispute is owned by others who are not parties to this matter. Thus, even if the river is found to be non-navigable, Defendants could claim ownership to the middle of the river only; and as riparian owners on only one bank, Defendants could not exclude persons from the whole river, because Defendants have no valid claim to riparian lands on both sides of the river. As stated above, Defendants' "beautification" leasehold on the Norfolk Southern property is insufficient to state a claim of ownership of the river bed, and Defendants failed to present any evidence whatsoever that John Espy and/or Norfolk Southern claim any such ownership. Thus, even if the Little Juniata River is determined to be non-navigable, the Commonwealth still owns to the center of that portion of the 1.3-miles claimed by the Defendants known as the Rothrock State Forest, and the Defendants cannot control that portion of the river. Nor can the Defendants claim control of that portion owned by Norfolk Southern

Railway Company or John Espy where no evidence was presented to establish that the Defendants control that side of the River.

In addition to the descriptions in Warrants, Returns of Surveys and current deeds, the granting of Warrants by the Commonwealth for vacant islands is evidence that the Commonwealth owned the bed of a river. Island warrants were sold by the Commonwealth as valuable land. In *Stover*, the Pennsylvania Supreme Court clearly set islands apart from other vacant lands of the Commonwealth:

Another consequence of the Pennsylvania doctrine as to navigable streams is that the islands in them belong to the state, and have always been considered as excepted from the general laws for the sale and settlement of the vacant lands of the Commonwealth. They have always been granted under laws of special application to islands.

Thus, it is clear that the Commonwealth owned and sold islands within rivers it believed were navigable.

The Act of April 8, 1785, authorized the sale of islands in the Susquehanna and its branches, the Ohio, the Allegheny, and the Delaware. (Cw. Ex. 26) The Commonwealth Agencies have identified three major islands in the Little Juniata River, for which warrants were issued pursuant to this Act, which were surveyed and returned, and which were dated in the early 1800's. They are the Peter Swine Island, the Jonathan Dorsey Island and the Jacob Isset Island. (Cw. Ex. 15-17). In addition, the Commonwealth Agencies have identified additional records from the Pennsylvania Historical and Museum Commission that listed additional islands within the Susquehanna and its tributaries. (Cw. Ex. 18-19).

The effect of the sale of these islands by the Commonwealth was summarized by Deputy Secretary Myers, who testified as follows: “[I]f the Commonwealth owned the bed, it owned the island and it could sell it. Otherwise, it wouldn't be able to because it would be owned by the

people on both sides.” (N.T. 6/12/06 at 27). Therefore, the sale of islands by the Commonwealth is additional proof that the bed of the Little Juniata River is owned by the Commonwealth.

The final item regarding title that supports a conclusion that the Commonwealth owns the bed of the Little Juniata River relates to the issuance of mining patents by the Commonwealth for lands in the bed of the river. “Authorization to patent land lying in the beds of navigable rivers has occasionally been given by statute. At one time, the Land Office was permitted to sell the right to take coal and other minerals in river beds, provided there was no interference with navigation and rights incidental thereto.” John G. Stephenson, III, *Land Office Business in Pennsylvania*, 4 VILL. L. REV. 175, 194 (1959). (Attachment B to this Memorandum).

The law referenced is the Act of April 11, 1848, P.L. 533, No. 379, which provided for the purchase of mining patents in the streambeds “of any of the public navigable rivers of this Commonwealth.” (Cw. Ex. 31). Although this Act was repealed by the Act of March 29, 1849 (Cw. Ex. 31), the Commonwealth did in fact issue at least one warrant for a mining patent. It issued the David Caldwell Warrant (Mining) of 100 acres within the bed of the Little Juniata River on October 10, 1848, after the date of the Act but before its repeal. (Cw. Ex. 20). This mining patent is therefore further proof that the bed of the Little Juniata River is owned by the Commonwealth, a conclusion supported by Deputy Secretary Myers who testified: “[I]n Wilson Oberdorfer’s list he went into some other indicators of Commonwealth ownership, including whether there were mining patents which would have existed if everyone believed at the time that you had to get a patent from the Commonwealth to be able to mine in the bed of the river.” (N.T. 6/12/06 at 26-27; Def. Ex. 1).

Based on all the evidence submitted by the Commonwealth concerning the original Warrants, Surveys, Returns of Surveys, and Patents, the undisputed title to the adjacent lands at issue, the dates of the Public Highway Declarations predating the Returns of Surveys, as well as the evidence concerning the islands and mining patents within the Little Juniata River, there is ample support for a conclusion that the bed of the Little Juniata River is owned by the Commonwealth and therefore is navigable at law. To conclude otherwise would be to reverse over 200 years of continuous and unchallenged ownership of the bed of the Little Juniata River by the Commonwealth.

**B. The Little Juniata River is Navigable in Fact.**

In Pennsylvania, rivers that are navigable in fact are considered navigable in law. *Cleveland & Pittsburgh Railroad Co. v. Pittsburgh Coal Co.*, 317 Pa. 395, 176 A. 7 (1935); *Flanagan v. Philadelphia*, 42 Pa. 219 (1862). Pennsylvania's courts, in determining navigability in fact, have followed the federal rule as enunciated by the United States Supreme Court in *The Daniel Ball*, 77 U.S. at 563; that is, whether the streams or rivers "are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade or travel are or may be conducted in the customary modes of trade and travel on water." *Lakeside Park Co. v. Forsmark*, 396 Pa. 389, 153 A.2d 486 (1959); *Cleveland & Pittsburgh Railroad Co.*; *Flanagan*.

Courts employ a historic test of navigability because the public's right to fish and otherwise use navigable waters vested unequivocally when the country was formed. *Martin*. While the United States Supreme Court has held that title to navigable waters vested in the public at the time of independence from England, the Pennsylvania Supreme Court has looked back to the time when William Penn was granted the charter to Pennsylvania as the time when title to navigable waters vested in the public. *Carson*. Navigability in fact therefore is to be

evaluated through the eyes of 18<sup>th</sup> and 19<sup>th</sup> century America, prior to the invention of modern day modes of transportation, at a time when the only significant routes of travel, trade and commerce were on waterways.

In defining the standard for navigability in fact, the United States Supreme Court has clarified the term “ordinary condition.” The Court in *United States v. Appalachian Electric Power Co.*, 311 U.S. 377 (1940), indicated that the term “natural or ordinary conditions” refers to the volume of water, the gradients and the regularity of the flow. It does not necessarily mean unimproved. *Id.* In addition, navigation does not have to be open at all seasons of the year or at all stages of water. *Economy Light & Power Co. v. United States*, 256 U.S. 113 (1921).<sup>7</sup> Nor is navigability, in the sense of the law, destroyed because the watercourse is interrupted by the occasional natural obstructions or portages. *Id.*

The true test of navigability of a river or stream does not depend on difficulties attendant to navigation or the means by which commerce is or may be conducted. *The Montello*, 87 U.S. (20 Wall) 430 (1874). If a river or stream is capable in its natural state of being used for purposes of commerce, no matter what the mode – vessels propelled by animal power, wind or steam – it is navigable in fact and becomes in law a public river or highway. *Id.* at 441-42. The *Montello* Court cautioned, however, that a stream must support more than a “fishing skiff<sup>8</sup> or gunning canoe [that] can be made to float at high water;” but rather, it must be “generally and commonly useful to some purpose of trade or agriculture.” *Id.* at 442. *See also United States v.*

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<sup>7</sup> *Cf., State of Oklahoma v. State of Texas*, 258 U.S. 574 (1922). Therein, the Supreme Court, in holding that the Red River is not susceptible of being used in its ordinary condition as a highway for commerce, relied upon the fact that the river does not have a continuous and dependable volume of water. However, the section of the Red River that was at issue had “a fall of three feet or more per mile and for long intervals the greater part of its extensive bed is dry sand interspersed with irregular ribbons of shallow water and occasional deeper pools. Only for short intervals, when the rainfall is running off, are the volume and depth of the water such that even very small boats could be operated in it.” *Id.* at 587. The Red River is factually distinguishable from the Little Juniata River.

<sup>8</sup> Merriam-Webster Online Dictionary defines “skiff” as “any of various small boats; *especially* : a flat-bottomed rowboat.”

*Holt Bank*, 270 U.S. 49 (1926); *Brewer-Elliott Oil & Gas Co. v. United States*, 260 U. S. 77 (1922) (the navigability of a river or stream depends upon whether the river or stream in its natural state affords a channel for useful commerce.)

Although the United States Supreme Court has not used the term “broad” as a qualifier for the phrase, “highway for commerce,” *see, e.g., The Daniel Ball*, and *The Montello*, the Pennsylvania Supreme Court in *Lakeside Park Co.* sought to define what is required in order for a waterway to be considered navigable in fact in the Commonwealth. The Court held:

We think that the concept of navigability should not be limited alone by lake or river, or by commercial use, or by the size of water or its capacity to float a boat. *Rather it should depend upon whether water is used or usable as a broad highroad for commerce and the transport in quantity of goods and people, which is the rule naturally applicable to rivers and to large lakes, or whether with all of the mentioned factors counted in the water remains a local focus of attraction, which is the rule sensibly applicable to shallow streams and to small lakes and ponds. The basic difference is that between a trade-route and a point of interest. The first is a public use and the second private.*

*Id.* at 396, 153 A.2d at 489 (emphasis added). Although this standard was quoted by courts in a handful of subsequent decisions,<sup>9</sup> the courts did not provide further guidance regarding what qualifies as sufficient commerce to be considered “broad.”<sup>10</sup> The Commonwealth Agencies therefore assert that a reasonable interpretation of the term “broad” in this context relates to the volume of goods and their diversity. This view is certainly consistent with the *Lakeside Park Co.* Court’s use of the terminology, “in quantity of goods,” and its drawing a distinction

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<sup>9</sup> *E.g., Pennsylvania Mountain Properties, Inc. v. Tyler Hill Realty Corp.*, 767 A.2d 1096 (Pa. Super. 2001); *Pennsylvania Power & Light Co. v. Maritime Management Inc.*, 693 A.2d 592 (Pa. Super. 1997); *Livingston v. Pennsylvania Power & Light Co.*, 609 F. Supp. 643 (E.D. Pa. 1985). These cases and *Lakeside Park Co.* address the navigability of lakes. In Pennsylvania, for purposes of determining navigability in fact, the test for rivers is different from the test for lakes. *Id.*

<sup>10</sup> We know, however, that the Pennsylvania Superior Court in *Maritime Management, supra*, affirmed the trial court’s finding that there was insufficient evidence that Wallenpaupack Creek was ever a broad highroad of commerce. The only evidence in that case was a short passage from *History of Wayne, Pike and Monroe Counties, Pennsylvania* that was read into the record by Maritime’s Counsel. Certainly, evidence, such as the wealth of historical evidence that was introduced by the Commonwealth Agencies in the present case, was not offered.

“between a trade route and a point of interest.” The Commonwealth Agencies note that while the *Lakeside Park Co.* Court referred to people, there is no support in the law for the proposition that commercial passenger travel is required in order that a river may be found navigable in fact.

Applying these precedents to the present case, the Little Juniata River is navigable in fact. The Commonwealth Agencies presented ample historical evidence to support a conclusion that not only was the Little Juniata River susceptible of being used but it was, in fact, used in its ordinary condition as broad highway for commerce, over which trade and travel were conducted in the customary modes of trade and travel on water.

Specifically, the Commonwealth Agencies presented the testimony of Dr. Judith Heberling, Senior Historian and Chief Operating Officer of Heberling Associates, Inc., a historical and archeological consulting company. (N.T. 6/12/06 at 78-79). Dr. Heberling is a native of Huntingdon County who earned a B.A. in history from Juniata College and a master’s degree and a Ph.D. in United States history from the University of Delaware. (N.T. 6/12/06 at 80-82). She is a professional historian trained in the U.S. history research methodology. (N.T. 6/12/06 at 80-81). Dr. Heberling’s historical research has focused on 18<sup>th</sup> and 19<sup>th</sup> century politics, transportation and manufacturing. She was qualified and accepted by the Court as an expert in history with a specific focus on those subjects. (N.T. 6/12/06 at 87-89).

Dr. Heberling was tasked by the Commonwealth Agencies with determining whether or not the Little Juniata River historically served as a commercial or trade route. (N.T. 6/12/06 at 89-90). Dr. Heberling began her research with a very broad literature review which she subsequently refined to sources specific to the period from the Revolutionary War era until around 1850, when the railroad came through the area. These sources included letters, business

records, court records, newspapers, historical accounts, the Pennsylvania archives and economic histories. (N.T. 6/12/06 at 90-100; Cw. Ex. 52).

Upon finishing her research, Dr. Heberling reached a conclusion, within a reasonable degree of historic certainty, regarding whether or not the Little Juniata River served as a commercial or trade route historically. She testified that in her professional opinion “the historical evidence clearly indicated . . . that the Little Juniata River was used as a commercial route over a long period of time.” She defined that period as the revolution through 1850. (N.T. 6/12/06 at 100).

The evidence supporting Dr. Heberling’s opinion is of record and is voluminous. The Little Juniata River flows through the ridge and valley province of the Appalachian Highlands. These ridges were a formidable barrier to travelers and to commerce, leaving the Little Juniata River and similar rivers as the only way to move goods, aside from traversing the ridges on extremely rudimentary and rugged roads. (N.T. 6/12/06 at 101-104; Cw. Ex. 52). Nonetheless, the Juniata River as fed by the Little Juniata River and by the Frankstown Branch was a major transportation source. (N.T. 6/12/06 at 104-105; Cw. Ex. 52). The other principal inland rivers in Pennsylvania, such as the Allegheny, the Monongahela, the Ohio and the Susquehanna, all of which are navigable, presented the same natural conditions and difficulties as did the Little Juniata River. (N.T. 6/12/06 at 105-106; Cw. Ex. 52).

Newspaper articles and other sources described the Little Juniata River in positive terms with regard to business and commercial ventures. (N.T. 6/12/06 at 106-108, 111-116; Cw. Ex. 34, 52). These newspaper articles and notices, *inter alia*, described property for sale along the river situate “in a healthy part of [Huntingdon] County on a navigable stream,” while another described the Little Juniata River as “a never failing stream.” (N.T. 6/12/06 at 108, 115; Cw. Ex.

34). Another article examined industry in Huntingdon County in 1826 in the townships located along the Little Juniata River and listed 120 saw mills, 62 grist mills and 84 distilleries in that area. (N.T. 6/12/06 at 111-114; Cw. Ex. 34, 52).

Review of census documents bears out the newspaper description of the Little Juniata River Valley as an industrial center. During the period studied by Dr. Heberling, the area along the Little Juniata River and Spruce Creek was the center of the world famous Juniata River Iron, and was the center of the iron industry in Pennsylvania for a significant period. (N.T. 6/12/06 at 115-116; Cw. Ex. 52).

The Juniata River and its branches including the Little Juniata River were well-traveled routes from the Susquehanna Valley to both the west and the south. Their natural importance as a transportation corridor was enhanced by their status as the only navigable rivers flowing generally east and west through and across the region's ridges. (Cw. Ex. 52 at 7). Despite some earlier settlement attempts, sustained settlement in the Juniata River Valley did not occur until the late 1780's after the end of the Revolutionary War. (N.T. 6/12/060 at 118-121; Cw. Ex. 52).

The economy during the late 18<sup>th</sup> to mid-19<sup>th</sup> century period was largely rural and based on two things, agriculture and commerce. In addition, many grist mills and distilleries developed. Because shipping goods over the mountains was both difficult and expensive, trade developed primarily with Baltimore due to the flow direction of the Juniata River. (N.T. 6/12/06 at 122-125; Cw. Ex. 52). The existence of grist mills and the like was confirmed by the federal census of manufacturers. (N.T. 6/12/06 at 125-127). The growth of saw mills, grist mills and other industries was facilitated by the river, which provided power, needed water, and a means to transport products to market. (N.T. 6/12/06 at 127-128).

During the late 18<sup>th</sup> and early 19<sup>th</sup> centuries, there developed a critical mass of industries along the Little Juniata River. The output of these industries was impressive when viewed in the context of the times and the population of Huntingdon County. (N.T. 6/12/06 at 129-131; Cw. Ex. 52).<sup>11</sup> The growth of industries around the Little Juniata River was driven by the natural resources available, particularly water and timber. The Little Juniata River was a natural highway for taking the products of these industries to market. (N.T. 6/12/06 at 132-134; Cw. Ex. 52).

Water transportation was cheaper than land transportation. If given a choice, people used the river. Bulky commodities (such as barrels of flour or whiskey or lumber) tended to go down the river to the Baltimore market because those products would have been prohibitively expensive if they had been sent in any great quantity over land. (N.T. 6/13/06 at 120).<sup>12</sup> Moreover, barrels of goods are easier to haul on an ark that is designed for such a purpose. (N.T. 6/12/06 at 152). Consequently, the main mode of transport on the Little Juniata River was shallow draft boats, including arks and rafts. (N.T. 6/12/06 at 135-140, 162, 166; Cw. Ex. 52). Arks or flatboats were flat-bottomed, approximately 60 to 90 feet long and 16 to 20 feet wide having ranging from two feet to three and half feet high to provide protection between the water and the boat. (N.T. 6/12/06 at 163-164). An ark could carry between 300 and 450 barrels or between 1200 and 1500 bushels of grain or comparable cargo and a few people to steer it. (N.T. 6/12/06 at 164; Cw. Ex. 41). Arks or flatboats were designed to draw no more than about 24 inches of water and could draw less than that depending on how heavily they were loaded. (N.T.

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<sup>11</sup> Dr. Heberling quantified this “impressive” output of the mills along the Little Juniata in her testimony. The average amount that a grist mill produced was about 1200 barrels of flour a year. (N.T. 6/12/06 at 130). Forges handled about a thousand tons of iron in a year. (N.T. 6/12/06 at 130). One saw mill produced 60,000 board feet of lumber in a year. (N.T. 6/12/06 at 130).

<sup>12</sup> Defendant’s Exhibit 5 provides insight into the market for these goods: “On Monday or Tuesday of this week nine arks laden with flour passed this place in safety destined for the Baltimore market. The Baltimoreans, we hope, will compensate our industrious citizens for their early visit.” (Def. Ex. 5; N.T. 6/15/06 at 170).

6/12/06 at 165). The development of the ark revolutionized commercial traffic on the inland rivers of Pennsylvania because it was a vessel that was designed to withstand the rigors of the river, it had sides and it was tough enough to be able to bounce off rocks and go over rough spots in the river that did not draw much water. (N.T. 6/12/06 at 165-166).<sup>13</sup>

Goods produced by these industries required transportation to market. The Little Juniata River was an important link in the region's transportation chain. The populace was forced to depend on bad local roads and inland rivers and streams, all of which were impassable at various times of the year. This made the linkage among them critical. The rivers and roads fed into each other so that it was possible to move goods in different directions. As noted above, the Little Juniata River was an important part of the regional transportation network. The problems on the Little Juniata River were typical of all inland rivers. (N.T. 6/12/06 at 148-156; Cw. Ex. 52).

In addition to newspaper articles, personal correspondence and other sources previously referenced, the Commonwealth of Pennsylvania, through a number of legislative acts, indicated its belief that the Little Juniata River was navigable. Among them are the three legislative highway declarations referenced previously. (N.T. 6/12/06 at 169-177; Cw. Ex. 21, 23, 24, 44, 52). These declarations came about in some measure because the citizens of the county petitioned the Court of Quarter Sessions, the General Assembly and Congress for declaration that rivers and streams were public highways. (N.T. 6/12/06 at 172-177; Cw. Ex. 38, 52).

Other legislative acts also reference the Little Juniata River as a navigable river and make provisions to preserve and enhance the navigability of the river. The Act of March 23, 1803, regarding obstructions on navigable rivers, listed the rivers and provided a process for resolving and dealing with those obstructions. These Acts were the result of public petitions to address

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<sup>13</sup> Flatboats were called the boat that never came back because the lumber comprising the boat was sold downstream along with its cargo. (N.T. 6/12/06 at 163). In this way, the arks themselves were a commodity that was shipped down river to other markets.

impediments to navigation. (N.T. 6/12/06 at 178-179; 6/13/06 at 9-11; Cw. Ex. 25, 38, 52).

Another Act from 1801, authorized the erection of a bridge over the Little Juniata River provided that said bridge did not “injure or impede the navigation” of the Little Juniata River. (N.T. 6/12/06 at 180; Cw. Ex. 22, 52). In addition, the General Assembly addressed navigability on the Little Juniata River in other contexts as well. Two Acts, one from 1799 and the second from 1801, regulate fisheries that would obstruct navigation on the Juniata River and its branches. (N.T. 6/13/06 at 11-12; Cw. Ex. 29, 30, 52).

The General Assembly also passed acts which authorized the sale of islands in rivers listed therein as long as those streams had been declared public highways. The Acts of 1785 and 1793 directed the sale of islands in the Susquehanna River and its branches, which included the Juniata River and the Little Juniata River. The Act of 1806 continued that activity, although not on the Little Juniata River. (N.T. 6/13/06 at 12-16; Cw. Ex. 26, 27, 28, 52).

The record shows applications for five island warrants on the Little Juniata River, the first made in 1794 after the first legislative public highway declaration. Of the five applications for warrants, two applicants, Peter Swine and Jacob Isett, completed the process and received title to islands in the Little Juniata River. (N.T. 6/13/06 at 16-28; Cw. Ex. 15-19, 52). The legislative acts, warrant applications and patents are a strong indicator that the Commonwealth early and often asserted ownership of the bed of the Little Juniata River. (N.T. 6/13/06 at 20).

Besides issuing island warrants and patents, the General Assembly in 1848 enacted a measure which permitted people to apply for mining patents in the bed of navigable rivers. The Act of April 11, 1848 specifically included the Little Juniata River in a list of those rivers. One such patent was applied for in the Little Juniata River. (N.T. 6/13/06 at 28-34; Cw. Ex. 20, 52).

In addition to the enumerated legislative acts, Dr. Heberling also reviewed newspapers and local historical records. Specifically, she researched the *Huntingdon Gazette* and two collections of letters, the Bucher letters and the Cadwallader papers. (N.T. 6/13/06 at 34-35; Cw. Ex. 34, 52). The newspapers of the 18<sup>th</sup> and 19<sup>th</sup> centuries were different from those of today. They were primarily political organs, and most of the articles were taken from other newspapers with a lot of foreign news that was important for trade. Local news consisted mostly of advertisements and notices. (N.T. 6/13/06 at 36-37).

One such article from 1826 was a promotional piece addressed to the legislature regarding the vibrancy of the Juniata River Valley economy. One portion of the article references 52 arks on Stone Creek, a navigable water, and 7 arks on Spruce Creek, a tributary of the Little Juniata River. (N.T. 6/13/06 at 37-40; Cw. Ex. 41, 52). If an ark was located on Spruce Creek, it could only go down the Little Juniata River. (N.T. 6/13/06 at 40; Cw. Ex. 52). Dr. Heberling reviewed several other newspaper articles from 1826 and 1827 that discussed rafts that had come down the Little Juniata River. (N.T. 6/13/06 at 41-42). Defendants expert, Mrs. Shedd, even testified that a regular feature in the Huntingdon newspapers was a segment called "Ark News." (N.T. 6/15/06 at 170-171).<sup>14</sup>

In addition to the newspaper articles contained in Cw. Ex. 34 and 41 and discussed in Cw. Ex. 52, Dr. Heberling also reviewed the Cadwallader papers. The plat maps of Cadwallader's town, Birmingham, are in evidence as Cw. Ex. 35 and 45. Mr. Cadwallader also sent letters to various individuals that he was trying to interest in buying property in Birmingham. Throughout this correspondence, Cadwallader consistently referred to navigation on the Little Juniata River. (N.T. 6/13/06 at 47-52; Cw. Ex. 39, 52). Cadwallader also wrote to

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<sup>14</sup> When arks would pass by Huntingdon, they would not be coming from the Raystown Branch of the Juniata River, but only the Frankstown Branch or the Little Juniata. (N.T. 6/16/06 at 30).

his brothers and referenced trade and navigation on the Little Juniata River. (N.T. 6/13/06 at 52-54; Cw. Ex. 40, 52).

Not only are the landings in the Little Juniata River mentioned on Cadwallader's plat maps (Cw. Ex. 35, 45), but they also are referenced in the Birmingham Borough Council minutes from 1901 and again in 1902. Therein, Council directs that a survey be done of the location of Cadwallader's landing. (N.T. 6/13/06 at 54-57; Cw. Ex. 42, 52). According to the June 30, 1902 minutes, the survey was completed and the landing was located. Although Birmingham never reached the heights envisioned by Cadwallader, it did turn into a thriving commercial center with a significant number of mills, some of the products of which were shipped by water. (N.T. 6/13/06 at 57-60; Cw. Ex. 52). Cadwallader developed a grist mill and a saw mill, and finally a paper mill along the Little Juniata River near present day Birmingham. (N.T. 6/12/06 at 140-145; Cw. Ex. 35, 45, 52). There was also a landing on the Little Juniata River at the Laurel Springs Paper Mill. (N.T. 6/12/06 at 148). By 1803, John Cadwallader added a distillery for making whiskey and had two saw mills. (N.T. 6/13/06 at 44). In 1823, Michael Wallace bought the Laurel Spring Paper Mill and other mills around Birmingham previously owned by Mr. Cadwallader. He built a new grist mill and added an oil mill, a plaster mill and another saw mill. (N.T. 6/13/06 at 44). Other industry developed north of Birmingham along the Little Juniata River including Tyrone Forge and Bells Mills. (N.T. 6/12/06 at 144-148; Cw. Ex. 52).

The historical record demonstrates that the Little Juniata River was a trade route for the numerous and productive mills, furnaces, forges, and farmers along the Little Juniata River to reach the eastern markets, especially Baltimore. The Defendants suggest that the Little Juniata River was little more than a local point of interest and not a trade route. Defendants' own exhibits provide the most convincing evidence to the contrary. For example, Def. Ex. 2 notes

that “The rain which fell last week swelled our streams sufficiently high to carry off *all the produce intended for an eastern market*. There were not less than 50 arks, heavily laden, passed down the Juniata, *from its several branches*, in this and Bedford County.” (Def. Ex. 2; N.T. 6/13/06 at 80) (emphasis added). Further, Def. Ex. 4 states that “[*t*]he *greater part of the surplus produce* of [Huntingdon] County has descended that river within the past few weeks....” (N.T. 6/15/06 at 168; 6/16/06 at 25; Def. Ex. 4) (emphasis added). The primary historical accounts describe the volume of trade going down the Little Juniata River, the Frankstown Branch and the Raystown Branch as being the *greater part* of the surplus produce and *all* the produce of Huntingdon County (which was impressive).<sup>15</sup>

In addition to the sheer volume of the “surplus produce” of Huntingdon County that was being shipped on the Juniata River and *all* of its branches, the records is replete with information on the types of products that were shipped on the Little Juniata River. Pig iron, the product of the iron furnaces, was shipped by water to eastern markets. (N.T. 6/12/06 at 136-137; 6/13/06 at 39; 6/15/06 at 165; Cw. Ex. 41). The historical record shows that the Juniata River and its branches carried grain, flour, whiskey, rye, corn, hides, lumber, shingles, locust posts, and hoop poles, and peach brandy, apple whiskey and country gin in small amounts. (Cw. Ex. 41, 52; N.T. 6/13/06 at 39, 49-50). The sheer volume and diversity of goods from raw materials and agricultural products to processed and manufactured products that were sent down the Little Juniata River should be the quintessential example of a “broad” highway of commerce.

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<sup>15</sup> Defendants would have this Court infer that none of the commerce of Huntingdon County (or very little) actually went down the Little Juniata River. The Commonwealth introduced ample evidence into the record of the numbers and types of industrial concerns specifically along the Little Juniata River along with figures on the typical output of these mills specifically. Defendants have not introduced any evidence to contradict this, but rather would argue that the numerous industrial concerns on the Little Juniata would not ship their goods on the river that is most convenient to them.

As described above, the evidence supporting Dr. Heberling's opinion that the Little Juniata River was used regularly as a commercial route over a period from the late 18<sup>th</sup> century through the 1850 is extensive. Dr. Heberling also noted that in the vast amount of material she reviewed and studied, there was nothing that would indicate to her that the Little Juniata River was not used as a corridor of commerce. (N.T. 6/13/06 at 68).

In addition to the ample historical evidence presented by the Commonwealth Agencies, *Commonwealth ex rel. Tyrone v. Stevens*, 178 Pa. 543, 36 A. 166 (1897) supports a conclusion by this Court that the Little Juniata River is navigable in fact. The lower court in *Tyrone* found as fact that "the Little Juniata River . . . was a public stream or highway for the purpose of navigation" at the time of the grant of the original warrants to the properties adjoining the portion of the river which was the subject of the litigation. *Id.* at 549. In addition, the lower court stated that the Little Juniata River was declared a public highway by the legislature of Pennsylvania in 1808, "but that said Little Juniata River has not been used as a public highway for the passage of rafts, boats and other vessels for more than 30 years past." *Id.* Both of these findings of fact are significant in that they are statements by a Pennsylvania court that the Little Juniata River was used by "rafts, boats and other vessels" and was navigable in fact as early as the mid to late 1700s.<sup>16</sup>

As Dr. Heberling noted, the heyday for commercial use of the Little Juniata River ended in the 1850's with the arrival of the railroad. However, the since diminishing commercial traffic on the river has no impact on whether the river remains navigable as a matter of law.

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<sup>16</sup> This Court should discount *Glasgow v. Altoona*, 27 Pa. Super. 55 (1905), wherein the court described the Little Juniata River as non-navigable. It should be noted that this "description" of the Little Juniata River was merely a restatement of the allegations made by the plaintiff in the case, not a holding or ruling by the court or even dictum. Further, *Glasgow* was a nuisance case, and the navigability of the river was never an issue before the court.

With regard to navigability, the courts have held that once a stream meets the navigability test at any point in history, it remains a legally navigable water. *See, e.g., Lehigh Falls Fishing Club*, 735 A.2d at 719, n. 2. The Commonwealth is not divested of title by disuse for commerce. *Poor v. McClure*, 77 Pa. 214 (1874); *Appalachian Electric Power Co.* Therefore, because the Commonwealth Agencies have established by a preponderance of the evidence that the bed of the Little Juniata River is owned by the Commonwealth and the river is navigable in fact, it remains a legally navigable body of water today.

Moreover, the courts have declined to examine the navigability of a stream or river on a piecemeal basis. *See Lehigh Falls Fishing Club, supra* (wherein the Pennsylvania Superior Court indicated that it would not re-examine the navigability of the Lehigh River piecemeal by piecemeal). As such, once a stream is determined to be navigable, it is navigable throughout its entire length. *Id.* The Little Juniata River accordingly is navigable in its entirety.

***Dr. Heberling's Opinion is Entitled to Greater Weight***

A review of the record in this matter, including the expert reports of Dr. Heberling and Mrs. Shedd, leads to the conclusion that Dr. Heberling's opinion and her testimony in support of that opinion is entitled to greater weight. As summarized above, Dr. Heberling's research on this issue was of greater breadth and depth and was commenced with a broad mandate from the Commonwealth Agencies. The materials reviewed by Mrs. Shedd were but a subset of those reviewed by Dr. Heberling and the record shows that Mrs. Shedd ignored or discounted relevant sources. Indeed, on several occasions, Mrs. Shedd cited portions of documents offered into evidence after which the Commonwealth Agencies offered on cross-examination the remaining portions which supported Dr. Heberling's opinion.

A review and comparison of the expert reports in evidence as Cw. Ex. 52 (Dr. Heberling) and Def. Ex. 42 (Mrs. Shedd) is illustrative of the points stated above. Mrs. Shedd's report references no public documents. She lists a minimal number of actual sources, and most of the resources in her bibliography are not referenced anywhere in the text. Despite her statement on page 2 that "the use of secondary sources . . . needs to be balanced by the use of primary source materials," Mrs. Shedd cites only three contemporary newspapers and two small manuscript collections. Her report, and her testimony, reference no professional historical studies or monographs. Most tellingly, Mrs. Shedd fails to provide sources for most of her conclusions, from which this Court may infer that much of what she presents is opinion instead of fact.

Before exploring these points further, the Commonwealth Agencies wish to be clear. Our critique of Mrs. Shedd's testimony is meant only to highlight the differences between her research method and presentation of relevant evidence and that of Dr. Heberling. It is not meant as a criticism of her expertise in the history field. As the Commonwealth Agencies noted above, Mrs. Shedd relied on a subset of the materials referenced by Dr. Heberling. Mrs. Shedd's charge from counsel was narrower and conclusion oriented, and her research and materials were less inclusive. For these reasons and as amplified below, Dr. Heberling's testimony is entitled to greater weight.

The question presented to Dr. Heberling was a broad one. She was tasked with determining whether or not the Little Juniata River served as a commercial or trade route historically. (N.T. 6/12/06 at 89-90). Mrs. Shedd, on the other hand, was given a narrowly focused question and an explanation of the issue at hand by Defendants' former counsel. Mrs. Shedd was asked "to investigate the historical use of the Little Juniata River as a broad highway

of commerce for the transportation of people and goods in quantity in and out of the area in time of ordinary flow.” (N.T. 6/15/06 at 119-120).

Mrs. Shedd acknowledged her “somewhat unconventional training ... in history” and testified that her methodology was to start with the specific question and to work outward (N.T. 6/15/06 at 118; 6/16/06 at 10-11). Contrast this with the researcher’s approach of Dr. Heberling that sought to cast the broadest information net and to focus the investigation more narrowly from there. (N.T. 6/12/06 at 90-100; Cw. Ex. 52). It is obvious from the record in this matter that Dr. Heberling’s method resulted in the examination of a far broader range of documents generally and produced a larger set of relevant documents upon which she could base her opinion.

The methodology employed by Mrs. Shedd caused her to miss or discount relevant documents that contained information contrary to the opinion she rendered. (N.T. 6/16/06 at 11-39, 45-47; Cw. Ex. 53, 54, 55, Def. Ex. 3, 4, 5, 6, 8, 25, 38). Moreover, materials relied upon by Mrs. Shedd, some of which were introduced into evidence by Defendants, contained information contrary to the conclusions reached by Mrs. Shedd based upon those materials. (N.T. 6/16/06 at 11-39, 45-47; Cw. Ex. 53, 54, 55; Def. Ex. 3, 4, 5, 6, 8, 25, 38).

For example, Mrs. Shedd testified on direct that she could find no evidence that any investigation was done by any person to determine navigability before the Commonwealth’s taking action on public highway declarations. (N.T. 6/15/06 at 133-134; 6/16/06 at 11-12). However, a portion of the Pennsylvania Statutes at Large from 1789 (Cm. Ex. 53) demonstrated that the Supreme Executive Council appointed a Board of Commissioners to view navigable waters including the Susquehanna and its branches. (N.T. 6/16/06 at 13-14; Cm. Ex. 53). The

action identified in the Statutes at Large predated the 1794 Declaration of Navigability for the Little Juniata River by five years. (N.T. 6-16-06 at 14).

Similarly, portions of the Pennsylvania Archives (Cm. Ex. 54), which document the Commonwealth's official business further contradict Mrs. Shedd's testimony regarding the public highway declarations. (N.T. at 6/16/06 at 15-17; Cm. Ex. 54). The portion of the Archives from 1790 provides that Commissioners were appointed to survey the waters of the "Juniata Rivers." (N.T. 6-16-06 15-17; Cm. Ex. 54). Again, the date of this action, 1790, precedes the 1794 public highway declaration for the Little Juniata River.

Although both of these exhibits are primary sources as defined by Dr. Heberling and by Mrs. Shedd, they were somehow missed or ignored by Mrs. Shedd during her research. The failure to review thoroughly the Pennsylvania Archives is curious because Mrs. Shedd testified that she was familiar with the Archives and that they were available at the Huntingdon County Historical Society and at Penn State. (N.T. 6/16/06 at 15-16).

The first example of Mrs. Shedd's citation to materials that contained information contrary to her opinion revolves around the local history produced by Lytle. (N.T. 6/16/06 at 20-22). On direct testimony, Mrs. Shedd cited Lytle at page 296 for the proposition that attempts to develop Birmingham were a failure. (N.T. 6-15/06 at 141, 6/16/06 at 20-21). However on the very next page, 297, Lytle noted a population of 400, active trade and industry, and loaded arks leaving the public landing. (N.T. 6/16/06 at 21-22). Similarly, Mrs. Shedd referenced another local history, Africa at page 394, regarding a plat of Birmingham (Defendants' Ex. 56) in an effort to show the absence of a public landing. (N.T. 6/15/06 at 140-141; 6/16/06 at 22-24). In the *very next paragraph*, Africa states that Birmingham was unsurpassed in importance as a

business center and that products were shipped downriver by arks or flat-bottomed boats. (N.T. 6/16/06 at 22-24).

Several of Defendants' Exhibits share similar infirmities. Mrs. Shedd cited the March 29, 1826 issue of the *Huntingdon Gazette* (Def. Ex. 4) and read the first paragraph into the record for the proposition that ark travel on the Little Juniata River was hazardous even during good boating conditions. (N.T. 6/15/06 at 167-168; 6/16/06 at 25; Def. Ex. 4). However, the second paragraph of that document states that "[t]he greater part of the surplus produce of [Huntingdon] County has descended that river within the past few weeks...." (N.T. 6/16/06 at 25; Def. Ex. 4). The testimony regarding an article from the March 8, 1826 *Huntingdon Gazette* (Def. Ex. 3) is similar. In the same paragraph cited by Mrs. Shedd, the paper reports that "twenty-four arks laden with flour and pig metal have passed [Huntingdon] on their way to market." (N.T. 6/16/06 at 26-27; Def. Ex. 4).

The same failure by Mrs. Shedd to credit contrary information contained in those documents is evidenced again with regard to a portion of the February 28, 1827 *Huntingdon Gazette* (Def. Ex. 5), where Mrs. Shedd failed to note a reference to ark traffic. (N.T. 6/16/06 at 28; Def. Ex. 5). Similarly, her testimony regarding the May 30, 1827 *Huntingdon Gazette* (Def. Ex. 7) omits mention of "not less than 50 arks . . . passed down the Juniata River from its several branches." (N.T. 6/16/06 at 27; Def. Ex. 7).

Mrs. Shedd's research, which focused on a very specific conclusion, produced only a subset of the materials surveyed and relied upon by Dr. Heberling. In rendering her opinion, Mrs. Shedd, missed, ignored, or unreasonably discounted directly relevant primary sources. Of those sources that she did cite as supporting her opinion, a significant number contained statements or information that, if not directly contrary to her opinion, certainly gave rise to at

least a contrary inference. This circumstance notably is absent from Dr. Heberling's testimony and opinion. Based upon these reasons and upon the totality of the evidence presented, Dr. Heberling's testimony is entitled to and should be given greater weight.

***The Newspaper Articles in Evidence Were Properly Admitted And May Be Relied Upon By Dr. Heberling***

Defendants in their pretrial statement and at several instances during the hearing (N.T. 6/12/06 at 109-110, 6/13/06 at 40-41, 71) assert that some of the material relied upon by Dr. Heberling was not admissible for the truth of the matter asserted or because the source was not a "disinterested observer." This material consisted of advertisements or notices from period newspapers such as the *Huntingdon Gazette* (Cm. Ex. 34).

Defendants failed to cite any legal authority for these propositions and the Commonwealth, despite diligent research, has been unable to find any. Notwithstanding the lack of supporting legal authority, Defendants' pre-trial statement and objection misstates the issue. Rather, as pointed out by the Commonwealth Agencies' counsel, the issue is weight to be given to any particular piece of evidence and to Dr. Heberling's testimony. (N.T. 6/12/06 at 110, 6/13/06 at 40-41).

The Superior Court faced an analogous circumstance in a stock circulation case, *In re Glosser Bros., Inc.*, 555 A.2d 129 (Pa. Super 1989). Therein, the court concluded that the trial court properly permitted an expert in stock valuation to testify as to the value of certain assets he considered in making his stock valuation based upon an appraisal of these assets performed by another at the company's request, even though the appraisal was not in evidence, because the appraisal was the type of source upon which an expert valuing stock would rely in forming his opinion. The court took note of the fact that the expert did not rely exclusively on the appraisal of the assets, but instead compared the values placed by the appraisal with the value actually

received in a later sale of such assets. As such, the expert's use of the appraisal numbers was based not only on the appraisal but also on his own confirmation of their reliability.

The *Glosser Bros.* Court also noted that when performing a stock valuation, an expert will commonly rely on "facts and figures provided by other experts in reaching an ultimate valuation determination, [t]he crucial point is that the court (or jury) be fully informed that these facts were in fact the partial basis for the expert's opinion," and "[t]he adverse party then has the opportunity . . . to present its own countervailing facts and figures and/or expert testimony to convince the factfinder that the weight to be given to the other side's expert testimony should be little or none." *Id.* A.2d at 142.

This rationale was explained more fully by the Superior Court in *Primavera v. Celotex Corp.*, 608 A.2d 515 (Pa. Super. 1992):

First, the rule is born of practical necessity. An expert's opinion may be based upon years of professional experience, schooling and knowledge . . . Moreover, and more importantly, . . . the expert is assumed to have the mastery to evaluate the trustworthiness of the data upon which he or she relies, both because the expert has demonstrated his [or her] expert qualifications and because the expert regularly relies on and uses similar data in the practice of his or her profession.

*Id.* at 519.

The *Primavera* court also stressed the importance of cross examination of the expert as part of the process of evaluating the material upon which the expert relies. The court stated:

In noting the necessity and value of permitting experts to rely on extrajudicial reports and sources, it is important to stress that it is actually the testifying expert's opinion which is being presented and which is subject to scrutiny, cross examination and credibility determinations . . . [T]he expert synthesizes the primary source material . . . into properly admissible evidence in opinion form. The trier of fact is then capable of judging the credibility of the witness as it would that of anyone else giving testimony.

608 A.2d at 520, 521; quoting in part *United States v. Sims*, 514 F.2d 147, 149 (9<sup>th</sup> Cir. 1975), cert. denied, 423 U.S. 845 (1975).

As such, the issue is not whether a particular advertisement may be admitted for the truth of the matter asserted. The issue instead is that the court as trier of fact is aware of the nature of all of the “substantial amount of material” (N.T. 6/12/06 at 110) relied upon by Dr. Heberling, that Defendants had the opportunity to examine Dr. Heberling on that material, and that the court on that basis may decide the weight to be given to that testimony. *Glosser Bros.; Primavera*.

The weight of all of the evidence leads to but one conclusion. The Little Juniata River was a corridor of commerce for a wide variety of commercial and agricultural products from the late 18<sup>th</sup> century until the 1850’s and is therefore under the rubric described herein navigable in fact.

***Defendants’ Attempts to Extrapolate and Impose 21<sup>st</sup> Century Conditions on 18<sup>th</sup> and 19<sup>th</sup> Century Commercial Navigation is Contrary to Law and is Entitled to Little Weight***

The established law cited above requires that navigability in fact must be viewed through the lens of 18<sup>th</sup> and 19<sup>th</sup> century America. For this reason alone, the Defendants’ efforts, through Dr. Vento, Mr. Barone and Captain Aspenliter, to focus this Court on contemporary conditions on the Little Juniata River must be rejected as contrary to law.

Moreover, the focus on contemporary conditions also must fail because it is contrary to primary and secondary historic sources as detailed for the Court by Dr. Heberling. It also must fail because the data upon which it is based is limited at best to a 60 year period between 1939 and 1999 as modeled in 2003, and because it omits consideration of important factors such as the impact of human activity on the river. Taken in whole or in part, the testimony of Dr. Vento, Mr. Barone and Captain Aspenliter is speculative at best, is largely irrelevant, and is entitled to little, if any, weight.

The state of the law on navigability in fact is discussed extensively above and will not be repeated here. The application of that established law instructs that the testimony regarding

contemporary conditions must be disregarded as irrelevant and contrary to law. Dr. Heberling's extensive research, her testimony and her opinion that the Little Juniata River was a corridor of commerce for a wide variety of commercial and agricultural goods from the late 18<sup>th</sup> century through the mid-19<sup>th</sup> century also is discussed extensively elsewhere in this Memorandum and will not be repeated here. The conclusions drawn based upon contemporary conditions are contrary to the weight of the historical evidence of record and for that reason should be disregarded.

Dr. Vento<sup>17</sup> expressed the opinion that there has been no significant change either in widening or lowering the channel depth of the Little Juniata River within the past 250 years. (N.T. 6/14/06 at 95). He further testified that rainfall remained relatively constant during that time, although the data he relied upon was sketchy until the 1890's, and was based upon precipitation records as far as 120 miles away in Harrisburg. (N.T. 6/14/06 at 97-100, 116; Def. Ex. 13).

Dr. Vento also testified that his opinion was based upon the limited stream flow data available from three USGS gauging stations, with collection periods ranging from 1939 to 1945 and from 1939 to 1999. (N.T. 6/14/06 at 103). Dr. Vento's stream cross sections were developed during his study. As such, they represent contemporary conditions. (N.T. at 104). He also testified that other Pennsylvania rivers such as the Susquehanna between Selinsgrove and Harrisburg, and the Juniata below the Narrows, also have the "nic points" he described as an impediment to navigation on the Little Juniata. (N.T. 6/14/06 at 105).

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<sup>17</sup> During voir dire, Commonwealth Agency counsel pointed out that Dr. Vento's professional geologist license was expired, contrary to his testimony and curriculum vitae which stated that he was in good standing. (N.T. 6/14/06 at 64). Dr. Vento testified that he had reviewed his license and that the requisite license fee was submitted (N.T. 6/14/06 at 65). However, a check of the Pennsylvania Department of State Bureau of Occupational Affairs web site on November 30, 2006 indicates that Dr. Vento's license expired in September 2005 and remains so.

Dr. Vento in developing his opinion focused on geology rather than the uses of the Little Juniata River. (N.T. 6/14/06 at 109). He did not take into account the historic uses of the river, the impact of the railroad, and the impact of dams or mill races. (N.T. 6/14/06 at 110). Dr. Vento admitted on cross-examination that the railroad had impacted the bank of the stream channel. (N.T. 6/14/06 at 110).

Dr. Vento also admitted that manmade activity could have an impact on the stream channel and that the deforestation in the area would increase runoff to the river. (N.T. 6/14/06 at 111). He further admitted that human activity could cause the stream channel to constrict. (N.T. 6/14/06 at 111). He testified also that an increase in stream volume could cause bank erosion. (N.T. 6/14/06 at 113).

Dr. Vento's testimony does little more than establish that geologic processes are slow. His testimony regarding flows is based upon contemporary conditions and fails to account for factors he admitted existed and could have an impact of the flow and on the channel of the Little Juniata River. Accordingly, it should be accorded little weight vis-à-vis Dr. Heberling's testimony that was based upon historic accounts from the time in question.

Mr. Barone's testimony was aptly summarized as "an opinion about whether a 90 foot by 16 by 5 ark can navigate the Little Juniata based on today's flow information." (N.T. 6/15/06 at 53). His expertise in geology raised significant questions regarding his ability to opine whether or not watercraft could have navigated the Little Juniata between the late 18th and mid-19<sup>th</sup> centuries. (N.T. 6/14/06 at 131-134).

Based upon two site visits and upon data from one stream gauge collected between 1939 and 1969, and upon a cross-section developed in 2003, Mr. Barone calculated that it would require 37 men to navigate a 90x16x5 ark down the Little Juniata. (N.T. 6/15/06 at 12). Mr.

Barone had never before been called upon to render such an opinion, and reviewed only the few primary sources from Mrs. Shedd's report. (N.T. 6/15/06 at 28).

The Quad 3 report upon which Mr. Barone relied developed its data by taking one portion of a 220 square mile area and multiplying by a factor of 1.5. (N.T. 6/15/06 at 28). The data was developed based upon the one stream gauge with appreciable data. (N.T. 6/15/06 at 32). This stream gauge is located upstream of the confluence of the Little Juniata and Spruce Creek and does not account for the additional flows from the creek. (N.T. 6/15/06 at 60).

Mr. Barone's opinion was based upon median flows during the period 1939 to 1999. During that time, the flow in the Little Juniata was equal to or greater than the median flow for the equivalent of 30 years. (N.T. 6/15/06 at 33). The Quad 3 data upon which Mr. Barone relied measured contemporary conditions between 1939 and 1999. The data does not show the stream channel profile during that period. The Quad 3 modeling was limited to 1939 and 1999 and did not model flows from the late 1700's to 1800's, did not account for human impact on the stream, and did not assess changes to the stream channel. (N.T. 6/15/06 at 35-45).

Mr. Barone's opinion was based upon median flow only, and did not eliminate the possibility that arks could navigate the river at other times. (N.T. 6/15/06 at 41). The Quad 3 data did not account for human impacts on the stream. (N.T. 6/15/06 at 44-45). The Quad 3 report modeled at 2003 cross-section with data from 1939 to 1999. (N.T. 6/15/06 at 46).

Mr. Barone testified on cross-examination that changes in the stream channel affect the manner and type of craft on the river. A higher stream bed affects stream flow and craft type, and human impacts affect the stream. Quad 3 did not take these factors into account. (N.T. 6/15/06 at 47).

Mr. Barone's testimony amounted to an opinion as to what would be required to navigate a 90x16x5 foot object through the Little Juniata River channel as it was in 2003 with the median flows from 1939 to 1999. (N.T. 6/15/06 at 48).

Mr. Barone's testimony is neither probative nor relevant to the question before the Court, whether the Little Juniata River was navigable during the late 18<sup>th</sup> through the mid-19<sup>th</sup> centuries. The testimony attempts to extrapolate a data calculation based upon limited 20<sup>th</sup> and 21<sup>st</sup> century circumstance and impose it upon the earlier period. The testimony is so limited and so contrived that it should receive no weight whatsoever.

Captain Aspenliter's limited testimony (N.T. 6/15/06 at 76) established two things. First, that basic seamanship principles have remained the same over time, and that knowledge of the local conditions is important. (N.T. 6/15/06 at 94-95). While these statements may fall under the category of truisms, they are neither probative nor relevant to the issue at hand. As such, Captain Aspenliter's testimony should be given no weight.

The combined testimony of Dr. Vento, Mr. Barone and Captain Aspenliter enlightens us to conditions on the Little Juniata if the river channel in 2003 and flows from 1939 to 1999 were at issue. They are not. The issue before the Court requires the evaluation of historical evidence to assess conditions in the late 18<sup>th</sup> to mid-19<sup>th</sup> century. As such, the testimony of these three gentlemen is neither relevant nor probative, and should be given no weight.

**C. Defendants Violated the Navigation Servitude.**

A navigation servitude exists in favor of the public for safe navigation regardless of whether or not the bed of the river is owned by the Commonwealth. Stipulation ¶20. Accordingly, private landowners of the beds of non-navigable waters do not have the right to exclude the public from floating or boating these waters. *See The Barclay Railroad and Coal*

*Co. v. Ingham*, 36 Pa. 194 (1860) (noting that while private property owners may own the stream bed over which water flows, a public easement exists for navigation, transportation and movement of fish). The actions of the Defendants, their employees and agents in harassing boaters and hanging cables and signs over and across the Little Juniata River interfered with the navigation servitude.

The Commonwealth Agencies are authorized to seek injunctive relief enjoining Defendants and their agents from interfering with the navigation servitude pursuant to their implied authority to act under the statutes administered by the Agencies as well as pursuant to their constitutional authority and obligations as trustees of the Commonwealth's public natural resources. *See* PA. CONST. art I, sec. 27. Accordingly, Plaintiffs request the Court to declare the Little Juniata River subject to a navigation servitude and to affirm the right of the public to float and boat on all parts of the river.

**D. Defendants Violated the Dam Safety Act.**

Defendants' actions in hanging cables with signs across the Little Juniata River without a permit and submerged lands license from the DEP constitute violations of the Dam Safety Act. Specifically, Section 18 of the Dam Safety Act provides that: "[I]t shall be unlawful for any person to: (1) Violate or assist in the violation of any of the provisions of this act or of any rules and regulations adopted hereunder. . ." 32 P.S. § 693.18. Section 6 of the Dam Safety Act provides that: "No person shall construct, operate, maintain, modify, enlarge or abandon any dam, water obstruction or encroachment without prior written permit of the Department." 32 P.S. § 693.6. "Water Obstruction" in the Dam Safety and Waterway Management Regulations is defined as including any ". . . structure located in, along, or across or projecting into a watercourse, floodway or body of water." 25 Pa. Code § 105.1. Water Obstructions include

“stream crossings” which are defined in the regulation as: “[A] pipeline, aerial cable or similar structure which is placed in, along, under across or over the regulated waters of this Commonwealth.” 25 Pa. Code § 105.1. A “regulated water of this Commonwealth is includes: [W]atercourses, streams or bodies of water and their floodways wholly or partly within or forming part of the boundary of this Commonwealth.”

The Little Juniata River is a regulated water of the Commonwealth under the Chapter 105 regulations, and the cable with signs is a stream crossing requiring a permit under the regulations. (N.T. 6/12/06 at 35, 38-42). Defendants admit they did not apply for or receive a permit for this water obstruction. Stipulation ¶ 33. Defendants’ failure to obtain a permit required under Section 6 of the Dam Safety Act is unlawful conduct pursuant to Section 18 and is a violation of the Act.

When a dam, water obstruction or encroachment is located in, along, across or projecting into a submerged land of the Commonwealth “in any navigable lake or river or stream declared a public highway,” the permittee must also obtain an “easement, right-of-way, license or lease” from DEP pursuant to the Dam Safety Act. 32 P.S. § 693.15. (N.T. 6/12/06 at 20-21, 29, 40-42, Myers). Again, because the signs and cables are water obstructions across a submerged land of the Commonwealth, the Defendants also were required under Section 15 of the Dam Safety Act to obtain a submerged lands license from DEP. Defendants admit they did not apply for or receive a submerged lands license from DEP for the signs and cables that were hung across the Little Juniata River. Stipulation ¶ 34. Failure to obtain a submerged lands license constitutes unlawful conduct under Section 18 and is a violation of the Act. While the Defendants have since removed the cable and signs, the Plaintiffs seek a holding from this Court that the

installation of the cable and signs violated Sections 6 and 15 of the Act and that Defendants are enjoined from such conduct in the future.

**E. Defendants Interfered with Lawful Fishing and Boating in Violation of the Fish and Boat Code**

Section 909 of the Fish and Boat Code makes it “unlawful for a person at the location where lawful fishing or boating is taking place to intentionally obstruct or physically interfere with lawful fishing or boating.” 30 Pa. C.S. §909(a). This section specifically list activities that constitute intentional obstruction or physical interference, including:

- (1) Disturbing fish in their habitat for the purpose of disrupting the lawful taking of fish where another person is engaged in the process of lawful fishing.
- (2) Blocking or impeding another person who is engaged in the process of lawful fishing and boating.
- (3) Using natural or artificial visual, aural, olfactory or physical stimuli to affect fish behavior in order to hinder or prevent the lawful taking of fish.
- (4) Creating or erecting barriers with the intent to deny ingress or egress to areas where the lawful fishing and boating is permitted.
- (5) Placing obstructions or objects in the water of this Commonwealth for the purpose of hindering lawful fishing or boating. 30 Pa. C.S. §909(b)(1)-(5).

The section further provides that the PFBC “may bring an action to restrain conduct declared unlawful in this section and to recover damages.” 30 Pa. C.S. §909(d).

There is evidence in the record through the testimony of WCO Rosser that the Little Juniata River in general and in the area in dispute was a popular fishing and boating resource. WCO Rosser testified that fishing “pressure was heavy” in the disputed area and that the area was used for canoeing and kayaking. (N.T. 6/13/06 at 176-177).

In addition, since 2000, WCO Garman received numerous complaints from anglers and boaters attempting to use the stretch of the Little Juniata River here in dispute. (N.T. 6/13/06 at 163-164). One or more of Defendants and their agents have erected cables across the river and posted keep out signs on those cables (Stipulation ¶¶ 31, 32 & 35L). Moreover, Defendants stipulated that if called by the Commonwealth Agencies to testify, 12 individuals would testify that Defendants, their employees and their agents confronted boaters and informed them that they may not continue downstream (Stipulation ¶¶35A & 35L); threw stones at a fisherman wading in the Little Juniata River (Stipulation ¶35B); threw dog food into the waters of the Little Juniata River where anglers were fishing (Stipulation ¶¶ 35I & 35K); and obstructed fishermen by yelling at them and ordering them out of the Little Juniata River (Stipulation ¶¶ 35B, 35C, 35D, 35F, 35I & 35K).

The Commonwealth Agencies are not seeking any damages for past violations of Section 909 of the Fish and Boat Code. However, the PFBC does request, as authorized by 30 Pa. C.S. §909(d), that Defendants be enjoined from any future activities that intentionally obstruct or physically interfere with lawful fishing and boating. Specifically, Defendants should be enjoined from interfering with lawful fishing and boating if the Court finds that the Little Juniata River is navigable. In the event that the Court finds the Little Juniata River is not navigable, Defendants should be enjoined from interfering with lawful fishing in those portions of the river where the bed is not owned or controlled by the Defendants and from interfering with lawful boating in accordance with the public easement for navigation.

**Declaratory and Injunctive Relief Should be Granted**

The Commonwealth Agencies seek a declaration that the Little Juniata River is navigable, that the lands below the ordinary low water mark are submerged lands owned by the

Commonwealth, and that the public has the right of use and enjoyment of the Little Juniata River, including the right to fish, boat, wade and recreate there. The Agencies also request that this Court enjoin Defendants', including their agents' and employees', interference with the Commonwealth's navigation servitude, their violations of the Dam Safety Act and the regulations promulgated at 25 Pa. Code Chapter 105, and their violations of the Fish and Boat Code. The Commonwealth Agencies also request that this Court enjoin and restrain Defendants', their agents and employees, from interfering with or excluding members of the public who are engaged in lawful activities on or in the Little Juniata River and on the submerged lands owned by the Commonwealth, and from hanging cables and signs over and across the Little Juniata River without necessary permits and approvals.

A review of the record establishes that the Commonwealth Agencies met their burden of proof and established their right to the relief sought. As to navigability, the evidence of record establishes that the 1794 public highway declaration preceded the 1803 returns of survey for the Connie Espy-owned property on the East/North bank. Adjacent the West/South bank of the river, the land at issue is owned by DCNR, and two non-parties, John Espy, Jr. and the Norfolk Southern Railway. Although these titles trace back to the Proprietaries warrant, there is no evidence of record that a survey was returned or that patent issued. As such, the date title to these properties vested is unknown. As Defendants asserted title to the bed of the Little Juniata River in New Matter, they failed to sustain their burden of proof. In addition, there is no evidence of record that John Espy, Jr. or Norfolk Southern Railway claims ownership of the submerged lands of the Little Juniata. Finally, the leasehold of Hidden Hollow Enterprises is not an estate in land sufficient to assert ownership. It is clear from this evidence that title to the riparian property bordering the banks of the Little Juniata River along the 1.3-mile disputed

stretch either vested after the 1794 public highway declaration, or, the record is bare as to such vesting. Based upon this record, the bed of the Little Juniata River is owned by the Commonwealth in trust for the benefit of the public. The Court therefore should grant the declaratory relief requested.

The record also supports a declaration that the Little Juniata River is navigable in fact. As extensively documented herein, the Commonwealth Agencies, through the testimony of Dr. Heberling, established that the Little Juniata River was, during the period from the latter portions of the 18<sup>th</sup> century until the arrival of the railroad in the 1850's, a corridor of commerce for a wide variety of commercial and agricultural products. The law directs that navigability be viewed through the prism of historical use, and Defendants attempts to project 21<sup>st</sup> century values and standards onto 18<sup>th</sup> and 19<sup>th</sup> century navigation is contrary thereto and is without merit. The record also establishes that Dr. Heberling's research was of a greater breadth and depth than that undertaken by Defendants' expert. For that and other reasons described above, Dr. Heberling's testimony is entitled to greater weight. Accordingly, for these reasons, the Commonwealth Agencies have established by a preponderance of the evidence that the Little Juniata River was a corridor of commerce, or a trade-route, for a wide variety of commercial and agricultural products in the late 18<sup>th</sup> and mid-19<sup>th</sup> centuries, the Little Juniata River is navigable in fact. The Court therefore should grant the declaratory relief requested.

In addition, Defendants have stipulated that a navigation servitude exists in favor of the public in the Little Juniata River. (Stipulation ¶20). Had they not done so, it is clear as a matter of law that the servitude exists. As such, the declaratory and injunctive relief sought by the Commonwealth Agencies should be granted.

The Commonwealth Agencies similarly established their right to the other injunctive relief sought. Since the Little Juniata River is navigable, Defendants may not exclude the public from, or otherwise interfere with, lawful fishing, boating and recreational activities on or in the river. Since the navigation servitude exists, Defendants may not interfere with lawful boating in the river and may not hang cables or other objects or otherwise interfere with lawful boating on the Little Juniata River. Therefore, the injunctive relief sought should be granted.

Where, as here, the river is navigable, Defendants may not hang cables and signs over and across the Little Juniata River without the necessary permits and approvals, and may not engage in such conduct that violates the Dam Safety Act, the Administrative Code and the rules and regulations at 25 Pa. Code, Chapter 105. Therefore, Defendants should be enjoined permanently from violating the Dam Safety Act and the regulations thereunder.

Finally, the Commonwealth Agencies have established that the Defendants, their employees and their agents harassed, threatened and otherwise interfered with lawful fishing and boating activities in violation of the Fish and Boat Code. Defendants' activities have resulted in complaints to the Commonwealth Agencies and the exclusion of the public from a Commonwealth resource held in trust for the public. Therefore, Defendants should be enjoined permanently from such interference.

Defendants have stipulated to the persons and entities against whom an injunction, if granted, should issue. (Stipulation ¶ 19).

### CONCLUSION

WHEREFORE, for the aforestated reasons, the Commonwealth Agencies request:

1. The Court declare that the Little Juniata River is navigable, declare that the lands below the ordinary low water mark are submerged lands owned by the Commonwealth and

declare that the public has the right of use and enjoyment of the Little Juniata River, including the right to fish, boat, wade and recreate there.

2. The Court enjoin the Defendants' and their agents' interference with the public's rights in the Little Juniata River, including the posting and/or hanging of signs, and threatening, harassing and otherwise attempting to exclude the public from fishing, boating, wading and/or recreating on and in the Little Juniata River and the submerged lands owned by the Commonwealth.

3. The Court enjoin Defendants' and their agents' interference with the navigation servitude in the Little Juniata River, including the posting and/or hanging of signs, and threatening, harassing and otherwise attempting to exclude the public from boating in the Little Juniata River.

4. The Court enjoin Defendants' and their agents' violations of the Dam Safety Act, Section 514 of the Administrative Code and the regulations promulgated at 25 Pa. Code Chapter 105, including the hanging of cables and signs over and across the Little Juniata River in the vicinity of the river's confluence with Spruce Creek and 1.3-miles further downstream.

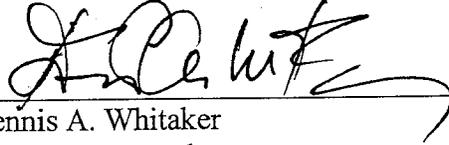
5. The Court enjoin Defendants' and their agents' violations of the Fish and Boat Code, including interference with members of the public who are engaged in lawful fishing and boating activities on or in the Little Juniata River.

6. The Court permanently enjoin and restrain Defendants and their agents from interfering with or excluding members of the public who are engaged in lawful activities on or in the Little Juniata River and the submerged lands owned by the Commonwealth.

7. The Court permanently enjoin Defendants and their agents from hanging cables and signs over and across the Little Juniata River without necessary permits and approvals.

Respectfully submitted,

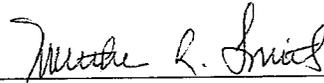
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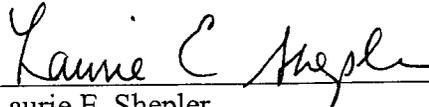
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**COMMONWEALTH – COMPARISON TABLE OF WARRANTS AND SURVEYS**

Referencing Commonwealth's Exhibits 1 through 31,  
Exhibit 32 (Map of Warrants, Surveys, Return of Surveys and Patents),  
and  
Exhibit 33 (Map of Current Ownerships)

<u>Name, Acreage, Location</u>	<u>Date of Warrant</u>	<u>Date of Survey</u>	<u>Date of Return of Survey</u>	<u>Date of Patent</u>	<u>Current Owner(s)</u>	<u>Public Highway Declarations</u>
Ann Brown Warrant 249 acres (West/South Bank) (Ex. No. 1)	March 5, 1794	January 7, 1795	July 12, 1802	July 14, 1802 to Alexander Fullerton	Comm. of PA, DCNR, Rothrock State Forest (Ex. No. 2)	Act of February 5, 1794 predates Warrant and Return of Survey (Ex. No. 21)
Peter Young Warrant 85 acres (East/North Bank) (Ex. No. 3)	Application August 1, 1766, Warrant dated August 31, 1803	October 20, 1767	August 31, 1803	Enrolled September 5, 1803 to Joseph Heister	Connie L. Espy (Ex. 6, 7)	Act of February 5, 1794 predates Warrant and Return of Survey (Ex. No. 21)
Abraham Sells Warrant 25 acres (East/North Bank) (Ex. No. 4)	February 22, 1785	May 28, 1791	August 31, 1803 (28 acres)	Enrolled September 5, 1803 to Joseph Heister (110 acres combined)	Connie L. Espy (portion only) (Ex. 6, 7)	Act of February 5, 1794 predates Return of Survey (Ex. No. 21)
Abraham Sells Warrant 100 acres (East/North Bank) (Ex. No. 5)	June 7, 1792	October 30, 1798	August 31, 1803 (81 acres)	Enrolled September 5, 1803 to Joseph Heister (110 acres combined)	Connie L. Espy (portion only) (Ex. 6)	Act of February 5, 1794 predates Return of Survey (Ex. No. 21)
Honorable the Proprietaries Warrant 5,913 acres (West/South Bank) (Ex. No. 8)	October 13, 1760	November 4, 1762	April 25, 1765		John P. Espy, Jr. (Ex. 9) and Norfolk Southern Railway Company (Pa. Lines LLC) (Ex. Nos. 10 - 13) (both own portions only), Hidden Hollow Enterprises (portion by Lease with NS Railway) (Ex. No. 14)	No Act predates the Warrant or Return of Survey
Peter Swine, Island 5 acres (Ex. Nos. 15, 18)	October 4, 1827	November 2, 1827	November 24, 1827	November 24, 1827		All Acts predate Warrant and Return of Survey (Ex. Nos. 21, 23-24, 26)
Jonathan Dorsey, Island 6 acres (Ex. Nos. 16, 18)	February 17, 1836	April 22, 1836	Accepted May 5, 1836			All Acts predate Warrant and Return of Survey (Ex. Nos. 21, 23-24, 26)
Jacob Isset, Island 7 acres (Ex. Nos. 17, 18)	May 1, 1809	May 17, 1809	Accepted March 1, 1810			Acts of February 5, 1794 and March 26, 1808 predate Warrant and Return of Survey (Ex. Nos. 21, 23, 26)
David Caldwell Warrant (Mining) 100 acres (Ex. No. 20)	October 10, 1848					All Acts predate Warrant (Ex. Nos. 21, 23-24, 31)
Miscellaneous Islands in Little Juniata River (Ex. 19)						Act of February 5, 1794 predates references (Ex. Nos. 21, 26)

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## LAND OFFICE BUSINESS IN PENNSYLVANIA

JOHN G. STEPHENSON, III†

IN 1927, the General Assembly of Pennsylvania abolished the Land Office Bureau in the Department of Internal Affairs, and the Secretary of Internal Affairs, acting under delegated powers, established in its stead the Bureau of Land Records.<sup>1</sup> This did not bring to an end the institution of the Land Office, which was established by William Penn and was possibly the oldest administrative office of government;<sup>2</sup> for the Department of Internal Affairs remains the Land Office of the Commonwealth.<sup>3</sup> It did signify, however, that two phases of the work

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1. The Land Office Bureau was abolished by § 2, Act of April 13, 1927, P.L. 207. The Department of Internal Affairs was designated as the Land Office of the Commonwealth by § 47, and the authority to establish bureaus was conferred on the Secretary of Internal Affairs by § 13 of the same act. These sections amended §§ 2, 1203, and 212 respectively of the Administrative Code of 1923. Act of June 7, 1923, P.L. 498. See PA. STAT. ANN. tit. 71, §§ 2, 333, 72 (1942). The new Bureau of Land Records is announced in the [1927] PENNSYLVANIA MANUAL 18.

2. The Land Office under the proprietaries was regarded as their private business, and was not regulated by statute. When, under Governor Denny, the assembly wanted to make it an office of record and the governor approved, interest was found in England to procure the royal dissent. See Yeates, J., in *Todd's Lessee v. Ockerman*, 1 Yeates 295, 297 (Pa. 1793). The Act of April 1, 1784, 2 SMITH'S L. 102, which re-opened the land office for the sale of lands, adopted the former customs and usages of the land office under the proprietaries. Accordingly, the editor of Smith's Laws found it advisable to append a prodigious note describing in detail the operations of the land office under the proprietaries and the Commonwealth. 2 SMITH'S L. 105-261. This note was of such consequence that the General Assembly, by resolution dated March 27, 1812, directed the Secretary of the Commonwealth, the Secretary of the Land Office, and the Surveyor General to check his citations and to make such additional notes as would show the whole usage of the land office under the proprietaries' government. Their reports, together with a reply by Charles Smith, Esq., are published in 5 SMITH'S L., introduction, pp. x-xxxi (1812). James Tilghman and John Lukens, last Secretary of the Land Office and Surveyor General, respectively, under the proprietaries, returned to office under the Commonwealth. [1927] PENNSYLVANIA MANUAL 366.

3. The Land Office was constituted in 1781 to receive the records and continue the business of the "former land-office or Board of Property" established under the

(175)

of the Land Office had been completed: the first, the task of transferring to private and public<sup>4</sup> ownership the vast reserve of wilderness which had been granted to William Penn by Charles II, to which was later added the Erie triangle;<sup>5</sup> and the second, the assignment of collecting the purchase price. There remained the duty of preserving the records of the patents upon which every public and private title is founded, and as an incident thereof, the work of supplying defects in the original titles to much land which had been lawfully appropriated but not finally patented.

After the turn of the century, the volume of applications for vacant and unappropriated land dwindled.<sup>6</sup> Conservationists secured for the

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proprieties. The office was to consist of three persons, whose titles correspond to those under the proprietaries: the Secretary, the Receiver General, and the Surveyor General. Act of April 9, 1781, 1 SMITH'S L. 529, § 2. The office of Receiver General was abolished in 1809 and his records, powers and duties were transferred to the Secretary of the Land Office. Act of March 29, 1809, P.L. 122, 5 SMITH'S L. 46. In 1843, the powers and duties of the Secretary of the Land Office were transferred to the Surveyor General. Act of April 17, 1843, P.L. 324, § 5. With the new Constitution becoming effective January 1, 1874, the duties of the Surveyor General devolved upon the Secretary of Internal Affairs. Art. IV, § 19, implemented by Act of May 11, 1874, P.L. 135. The Department of Internal Affairs was designated to act as the Land Office of the Commonwealth by § 47, Act of April 13, 1927. See PA. STAT. ANN. tit. 71, §§ 333, 917, 920, 922, 923 (1942).

4. In speaking of the public lands, that which has been conveyed to the Commonwealth or any administrative agency thereof is regarded as appropriated, and may not be patented as vacant and unappropriated. The statutes provide, for example, for the granting of patents to the Department of Forests and Waters. PA. STAT. ANN. tit. 64, § 324 (1941). No land owned by the state may be sold without legislative sanction. PA. STAT. ANN. tit. 71 § 194 (1942). Land which has once been patented by the state and has been reacquired through escheat, forfeiture, or any other cause is not open for settlement or warrant. *Blaine v. Crawford*, 1 Yeates 287 (Pa. 1793), *Skeen v. Pearce*, 7 S. & R. 303 (Pa. 1821). Escheats were, however, administered by the Land Office until the establishment of the office of Escheator General in 1787. Act of September 29, 1787, 2 SMITH'S L. 425.

5. The royal charter was dated March 4, 1681. It conveyed a tract bounded on the east by the Delaware River, on the north by the beginning of the 43° of North Latitude and on the south by the beginning of the 40° of North Latitude, excepting a circle drawn twelve miles from New-Castle, and extending westward 5° in longitude. 5 SMITH'S L. 406. By calculation, the province contained 35,361,600 acres. SERGEANT, VIEW OF THE LAND LAWS OF PENNSYLVANIA 25 (1838). This was later augmented by the purchase of the Erie Triangle from the United States by deed dated March 3, 1792, the land having been ceded by Massachusetts and New York to the federal government. Note, 2 SMITH'S L. 124. The original boundaries were subsequently adjusted with Maryland, Virginia and New York, and jurisdiction over the Delaware islands with New Jersey by a series of agreements, that with Maryland before, and the others after, the Revolution. Note, 2 SMITH'S L. 129-135. The right to the possession of these lands was purchased from the Indian tribes by a series of treaties, the last of which was concluded at Fort McIntosh in 1785, and by a cession of the Erie triangle lands in 1789. Note, 2 SMITH'S L. 109-124. The title of the heirs of William Penn to all of this land excepting what had been previously appropriated to other persons or held by the proprietaries in their private right or capacity, was vested in the Commonwealth by Act of Nov. 27, 1779, 1 SMITH'S L. 479; PA. STAT. ANN. tit. 64, §§ 1-8 (1941).

6. During the year ending November 30, 1917, for example, there were seventeen applications for vacant land, four of which were for islands. Seven new warrants were issued for vacant lands. [1918] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. 9A, 14A. A few years after the war it was stated that there were then no large bodies of vacant land within the limits of Pennsylvania, but that small tracts were yet

state the preemptive right to secure whatever land was left for forest culture and reservation.<sup>7</sup> It was assumed that all public land had been transferred to private ownership, and this assumption was supported by the public statements of the Land Office.<sup>8</sup> Actually, no one really knew;<sup>9</sup> but if this were indeed the fact, a search for the patent would be an unnecessary step in a title examination, because the passage of time would cure all defects other than claims of the Commonwealth.<sup>10</sup> Accordingly, lawyers ceased to carry their examinations back beyond fifty years,<sup>11</sup> and a new generation grew unfamiliar with the land office practice which had been an important part of the work of earlier lawyers. In recent years, state and federal agencies have insisted on a complete examination of title whenever land is acquired with public funds, and this has reawakened interest in the Land Office. It is the purpose of this Article, which grew out of a study undertaken for the Secretary of Internal Affairs,<sup>12</sup> to explain the use of the land records and the procedures, which are both simple and inexpensive, whereby defects in those records may be corrected.

While no one knows at this moment how much land remains unappropriated or improperly titled, it is not correct to assume that the

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occasionally discovered in various sections of the state which by law remained open for sale. [1924-5] PENNSYLVANIA STATE MANUAL 79.

7. Act of March 28, 1905, P.L. 67; see PA. STAT. ANN. tit. 64, §§ 261, 321-8 (1941). This act also terminated the appropriation of lands in the beds of navigable rivers and streams declared by law to be public highways. Governor Tener, in his message to the General Assembly in 1913 recommended that the state should retain its ownership of vacant islands in the interest of future conservation programs. MESSAGE OF THE GOVERNOR, 1913, at 16. When the legislature failed to act, the governor blocked action on pending applications by refusing to appoint appraisers, and this practice continued. See [1933] PENNSYLVANIA MANUAL 197.

8. See note 6 *supra*.

9. "No records have ever been kept in the Department, or formerly, under the Secretary of the Land Office, or the Surveyor General to show what vacant lands the Commonwealth is possessed of." [1924-5] PENNSYLVANIA STATE MANUAL 78. See [1905] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. 21A.

10. This is an unwarranted assumption, as will be demonstrated later in this Article. The statute begins to run only when a cause of action arises.

11. A contemporary writer states that while a complete abstract would show title back to the Commonwealth, it had become the practice to run a title back fifty years. In the case of city land, it was run beyond fifty years until the land was first laid out in building lots; in the case of country land, until it had first been brought under cultivation. NICHOLSON, A TREATISE ON THE LAW RELATING TO REAL ESTATE IN PENNSYLVANIA 511 (1924).

12. In June, 1957, the Secretary of Internal Affairs authorized a study of the powers, duties and procedures of the Bureau of Land Records and the Board of Property for the purpose of drafting administrative regulations and preparing a codification of the statute law. The study was made under the supervision of the author. In this Article, the author discusses only existing case and statute law and the published regulations of the Department of Internal Affairs. The author is alone responsible for the opinions expressed herein, but is grateful to acknowledge his indebtedness to Dr. William C. Seyler, Deputy Secretary of Internal Affairs, and to A. G. Reese, Director of Land Records, who permitted the author to examine the records and to observe proceedings in the Bureau of Land Records, and spent many hours discussing the problems of administration.

records are not available from which it can be determined by search whether a patent has ever been issued for a particular tract. The difficulty is largely a difficulty of indexing, not a deficiency of records.<sup>13</sup> Warrants and patents were indexed only in the names of the parties until 1907, when the Department of Internal Affairs was authorized<sup>14</sup> to prepare maps showing the location of all appropriated tracts. To the present time, connected warrantee tract maps have been completed for only seventeen of the sixty-seven counties; but while this gives some conception of the difficulty of the task, it shows at the same time that it is not insuperable. When it is discovered that there is no patent for a tract which has long been occupied as private property, the deficiency may be supplied readily.

The statement that the Land Office of the Commonwealth does not know how much vacant public land remains to be sold will, of course, be just as surprising today as it was to Mr. Justice Huston when he undertook a study of the Land Office published in 1847.<sup>15</sup> He assumed that there would be a map for each county and township upon which each entry and patent would be recorded, as in the case of the public lands of the United States.<sup>16</sup> The federal procedure was adopted, however, after the inadequacy of the state procedure had been demonstrated. William Penn had received a vast wilderness described in terms of latitude and longitude and a river, the exact source of which was not precisely known.<sup>17</sup> Instead of surveying the land first and selling lots by the plan, as the federal government did, he adopted the practice of selling warrants for a quantity of land to be located.<sup>18</sup> The warrants were directed to a deputy surveyor who measured out the quantity on

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13. See [1905] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. 21A.

14. Act of June 13, 1907, P.L. 621; PA. STAT. ANN. tit. 71, §§ 914, 5 (1942). The seventeen counties are Allegheny, Beaver, Cameron, Dauphin, Elk, Fayette, Greene, Lancaster, Lawrence, Luzerne, McKean, Mercer, Pike, Potter, Sullivan, Tioga and Washington. Work on Berks and Schuylkill is now under way. It is also known that connected warrantee tract maps are available in several other counties, some of them prepared by the county surveyors, and others obtained from the Land Office Bureau by local interests, who purchased the drafts at the usual rates. The availability of such maps will greatly facilitate the completion of the official drafts.

15. See generally HUSTON, AN ESSAY ON THE HISTORY AND NATURE OF ORIGINAL TITLES TO LAND IN THE PROVINCE AND STATE OF PENNSYLVANIA (1849).

16. 1 STAT. 465 (1796), as amended; 43 U.S.C. §§ 751 *et seq.* (1928). For a description of the federal procedure, see *Southern Pacific R.R. v. Fall*, 257 U.S. 460 (1922).

17. The patent described the eastern boundary as extending northwards along the Delaware River to the 43d parallel of North Latitude "if the said river doth extend so far northwards," otherwise by a meridian line from the head of said river. Appendix, 5 SMITH'S L. 406 (1812).

18. The system was previously employed in the Delaware valley area under Governor Andros. SERGEANT, VIEW OF THE LAND LAWS OF PENNSYLVANIA 22, 34 (1838).

the ground with some tolerances,<sup>19</sup> made a draft thereof, and returned it to the Surveyor General.<sup>20</sup> For want of a map on which to record the survey, it was filed and indexed under the name of the warrantee. The patent, when issued, was enrolled and similarly indexed. To ascertain what land had been claimed, one had to have recourse to the land itself, where only the surveyor's monuments, and this at a time when much of the appropriated land had not yet been cleared, proclaimed a prior appropriation.<sup>21</sup>

There were, of course, some exceptions. The City of Philadelphia was laid out in streets and lots and surveyed before the lots were appropriated.<sup>22</sup> Several towns were laid out, surveyed, and sold by the proprietaries,<sup>23</sup> and the Commonwealth followed their pattern in laying out Allegheny,<sup>24</sup> Erie, Franklin, Warren and Waterford and selling the lots.<sup>25</sup> Following the Revolution, two tracts were set aside north and west of the Allegheny, one to supply bounty lands for the officers and soldiers, the other to redeem the depreciation certificates which

19. A ten per cent allowance, later decreased to six per cent, was originally allowed for roads and barrens. The allowance was the subject of some controversy between William Penn and the colonists in 1701. Note, 2 SMITH'S L. 139 (1810); SERGEANT, VIEW OF THE LAND LAWS OF PENNSYLVANIA 184 (1838). By virtue of this allowance, public roads were later laid out without compensation for the land taken. See *McClenachan v. Curwin*, 3 Yeates 362, 372 (Pa. 1802).

20. For a description of the early practice, see Note, 2 SMITH'S L. 105-261 (1810); SERGEANT, VIEW OF THE LAND LAWS OF PENNSYLVANIA 22, 34 (1838). For the effect upon the records, see [1907] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. A.11, 21A.

21. Courses and distances run on the ground are the true survey—the return of survey is only evidence thereof. This was in contrast with the practice in Maryland where the paper draft was regarded as the true survey. *Lilly v. Kitzmiller*, 1 Yeates 28 (Pa. 1791). For a discussion of surveying practice, see SERGEANT, A VIEW OF THE LAND LAWS OF PENNSYLVANIA 121-9 (1838). A deputy surveyor was appointed by the Surveyor General for each county. § 3, Act of April 9, 1781, 1 SMITH'S L. 529. PA. STAT. ANN. tit. 72, § 918 (1942). So long as the deputy surveyor, whose jurisdiction was confined to the particular county, continued in office, the marks of previous surveys would be recognized.

22. Rights to lots in Philadelphia were sold in England before the foundation of the colony. Later William Penn, who had sold more land than could be encompassed in a city, laid out Philadelphia into city lots which he allocated, making up the difference by rights to obtain warrants for lands in the "liberties." SERGEANT, VIEW OF THE LAND LAWS OF PENNSYLVANIA 224 (1838); Note 2 SMITH'S L. 140 (1810). Penn also planned to lay out the country land by townships, but this was never done. Note 2 SMITH'S L. 140 (1810).

23. The towns of Reading, York, Carlisle, Easton, Bedford, Sunbury and Hannah's Town (Westmoreland County) were laid out by the proprietaries. After the Revolution, custodians were appointed for the unappropriated lots in these towns. Act of April 10, 1781, 2 SMITH'S L. 533. These are to be distinguished from the proprietary tenths or manors. See SERGEANT, VIEW OF THE LAND LAWS OF PENNSYLVANIA 195 (1838). For a discussion of the history of certain lands dedicated as a common in Reading, see *Schwerin v. City of Reading*, 19 Berks 381, 559 (C.P. Pa. 1927); *Commonwealth v. Commissioners of Berks County*, 109 Pa. 214 (1885).

24. Authorizing a town to be laid out along the Allegheny and Ohio opposite Fort Pitt. Act of Sept. 11, 1787, 2 SMITH'S L. 414.

25. Ellicott's plan of Le Boeuf was accepted and the town renamed Waterford. Erie, Franklin and Warren were to be laid out. Act of April 18, 1795, 3 SMITH'S L. 233.

had been issued in the adjustment of their pay.<sup>26</sup> In these two areas, lots consisting of between two and three hundred fifty acres each were laid out on a plan, surveyed according to the plan, and drawn by the beneficiaries.<sup>27</sup> The undrawn donation lands were later opened up for settlement and purchase.<sup>28</sup> The procedure in the allotment of these lands was similar to that followed in the appropriation of the federal public lands.<sup>29</sup> When it is found at the present day that any such land has not been patented, a person who can show title thereto either by record or based on continuous and exclusive possession for the statutory period, may secure a patent for a fee of fifteen dollars, which includes both the price of the land and the office charges.<sup>30</sup>

In those areas where a survey did not precede appropriation, the tracts laid out for purchasers were not necessarily contiguous. Each applicant located his house and first clearing at a convenient place along a road or stream and surrounded it with the acreage to which his warrant entitled him.<sup>31</sup> In the case of the federal public lands, each entry or abandonment was required to coincide with the official subdivisions, which were contiguous,<sup>32</sup> but under the system employed in Pennsylvania, much land was left "concealed" between the surveys. In addition, since land held by right of settlement and improvement was neither available for appropriation nor a matter of record, large tracts of land further divided the surveys. This system, or lack of it, increased the difficulty of preparing the connected warrantee tract maps.<sup>33</sup> The Land Office could proceed only by fitting the individual drafts together like pieces in a jigsaw puzzle. For the indentures, there were the names of the adjoining warrantees, and for the aid which is sometimes given from the picture on a puzzle, there were occasionally noted on the individual drafts the places where township lines, streams and other monuments intersected the survey. When instead of an adjoiner, there was concealed vacant land or an unrecorded settlement, the pieces could

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26. Act of March 12, 1783, 2 SMITH'S L. 63.

27. The practice is described in the preamble to a supplemental act which made the general drafts in the Surveyor General's office the evidence of the location of the lots, and made it the duty of the deputy surveyors to run the lines again and remark the corners. Act of March 24, 1818, 7 SMITH'S L. 122; PA. STAT. ANN. tit. 64, § 193 (1941).

28. Act of March 26, 1813, 6 SMITH'S L. 64; PA. STAT. ANN. tit. 64, §§ 191, 192 (1941).

29. While the filing of an entry was the inception of title to the federal public lands, settlement was the inception of title to the donation lands. PA. STAT. ANN. tit. 64, § 192 (1941).

30. Act of April 29, 1909, P.L. 295, and Act of May 28, 1915, P.L. 571, amending Act of May 5, 1899, P.L. 229; PA. STAT. ANN. tit. 64, § 503 (1941).

31. See [1905] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. A21.

32. *Southern Pacific R.R. v. Fall*, 257 U.S. 460 (1922). See note 16 *supra*.

33. See note 14 *supra*.

not be fitted together, and recourse was necessary to actual surveys to locate various tracts.<sup>34</sup> In those counties for which the maps have been completed, it has generally been observed that whatever vacant and unappropriated land has been disclosed, has consisted of small tracts constituting concealed lands or gores between surveys and lands which are claimed by settlement and improvement.<sup>35</sup>

As the warrantee tract maps have been completed, they have been made available to all interested parties, and have been placed in the Recorder's Office of the particular county.<sup>36</sup> Beyond the compilation of the maps, the Department of Internal Affairs has at present no further duties. It is left to those who find themselves in possession of unpatented lands to make the discovery and to come in and secure a patent. In the course of buying and selling lands in the counties where maps are now available, it may be expected that title examiners will in due course discover whatever defects exist and insist upon their correction. This was not, however, accomplished in the period before the maps became available, largely because in actual practice, title examinations were not carried back that far.<sup>37</sup> The Secretary of Internal Affairs noted toward the end of the Nineteenth Century a marked increase in the number of applications resulting from the forming of syndicates for the purchase of large tracts of land underlaid with coal, the purchasers having been particularly anxious to obtain a continuous chain of title from the Commonwealth.<sup>38</sup>

Land which is not patented but has otherwise passed into private ownership is subject to a lien in favor of the Commonwealth for the purchase price of the land and the fees and expenses.<sup>39</sup> Whatever effort has been made by the Commonwealth to compel the perfection of title has been in the nature of an effort to realize upon these liens.<sup>40</sup> In 1863,

34. As to field work required and the difficulty in locating township lines, see [1907] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. 10A.

35. This appears to warrant the official statement that in general all public land has been appropriated, but small unpatented tracts are occasionally discovered. [1957-8] PENNSYLVANIA MANUAL 317.

36. PA. STAT. ANN. tit. 72, § 914 (1942). The maps were originally lithographed and bound by the state printer. An edition of one thousand copies was authorized at first. Act of June 13, 1907, P.L. 62. This was later reduced to five hundred copies. Act of May 11, 1911, P.L. 277. Later it was directed that the drafts be made on tracing linen, blue print copies to be furnished or sold. Act of March 30, 1921, P.L. 63. Copies are furnished the county recorders and the county commissioners.

37. [1899] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. A15.

38. See note 11 *supra*.

39. Hoffman v. Bell, 61 Pa. 444 (1869).

40. The terms of the proprietaries issued in 1769 called for forfeiture if the land was not paid for in twelve months, but this was never enforced. Biddle v. Cougal, 5 Binn. 142 (Pa. 1812). Arrears of purchase money due the proprietaries were vested in the Commonwealth by the Divesting Act. Act of Nov. 27, 1779, 1 SMITH'S L. 479; PA. STAT. ANN. tit. 64, §§ 1-8 (1941). The first of the land laws following the Revolution directed payment in four annual installments, and provided for exe-

faced with the heavy expenses of war, Governor Curtin asked for effective measures to collect unpaid purchase money and for a special tax on unpatented lands.<sup>41</sup> Pursuant to this recommendation, the General Assembly directed the Surveyor General to compile and to transmit a list of liens to the prothonotaries of the several counties for entry in a special docket.<sup>42</sup> While the General Assembly rejected the special tax, it increased the rate of interest on unpaid purchase money and authorized the Attorney General to proceed with the enforcement of the liens. The dockets were available in 1869,<sup>43</sup> and in 1871, the Board of Property was given discretionary power to direct the entry of suits by the Attorney General.<sup>44</sup> The Board of Property, however, took little action because of the depression then pending.<sup>45</sup> In 1897, finding the Board of Property ill suited to directing the collection of liens, the General Assembly transferred the duty to the Secretary of Internal Affairs.<sup>46</sup> The incumbent, James W. Latta, began what was probably the first effective drive to collect. Many persons were made aware for the first time of the existence of liens against their land. Having relied upon inadequate examinations of title in the acquisition of their property, they had held it in complete ignorance.<sup>47</sup> They insisted that the Commonwealth should be estopped for not having made its claims known sooner, and organized resistance developed. The following year, after a bill had passed the General Assembly making some ameliorating changes at the suggestion of the Secretary of Internal Affairs, it was recalled from the Governor and replaced by a measure which authorized

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cution to be issued by the county commissioners. Act of April 9, 1781, 1 SMITH'S L. 13. The period was later extended by several acts, for example the Act of April 5, 1782, 2 SMITH'S L. 13. In 1807, the legislature directed interest to be compounded. Act of April 13, 1807, 4 SMITH'S L. 471. It was held, however, that title was not divested under these acts unless the land was sold on execution. *Phillips v. Shaffer*, 5 S. & R. 215 (Pa. 1819). In 1785 and again in 1820, patents were authorized to be issued in exchange for a mortgage. Act of Sept. 16, 1785, 2 SMITH'S L. 339; Act of March 22, 1820, P.L. 99. In 1826, the Secretary of the Land Office was directed to enter suit. Act of April 8, 1826, P.L. 260, PA. STAT. ANN. tit. 64, §§ 441-43. In 1835, it was sought to induce debtors to pay by offering to commute liens according to a system of graduation. Act of April 10, 1835, P.L. 148. This practice was discontinued on December 1, 1859, after a new act had restored the original prices but established a lower rate of interest. Act of March 19, 1858, P.L. 132; PA. STAT. ANN. tit. 64, § 532.

41. [1898] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. A21.

42. Act of May 20, 1864, P.L. 914. It was later found expedient to direct the Surveyor General to provide the dockets. Act of April 4, 1868, P.L. 60.

43. [1898] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. 24A.

44. Act of May 5, 1871, P.L. 261, further implemented by Act of April 11, 1872, P.L. 51, which directed the county surveyors to ascertain the present owners and to notify them of the lien. See PA. STAT. ANN. tit. 64, §§ 468-72 (1941).

45. [1898] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. 24A.

46. Act of May 26, 1897, P.L. 101; PA. STAT. ANN. tit. 64, § 474 (1941).

47. The current owner would have had no notice from the land lien dockets as these carried the names of the original warrantees, which were generally unknown to the current owner, and did not identify the tract by map.

the satisfaction of the lien for the purchase price and the office charges and the issuance of a patent for fifteen dollars.<sup>48</sup> While this sum scarcely paid the cost of further administration, the Department finally succeeded in closing the land lien docket.<sup>49</sup>

The closing of the land lien docket did not, however, put an end to all liens for the purchase price of lands. Because of the condition of the records in the Land Office Bureau, liens could be entered only in cases where warrants had been issued or surveys returned, and complete lists of these could not be assured. While the issuance of a patent conclusively bars the Commonwealth, private title can be acquired in two ways without the granting of a patent: the first, by the acquisition of office rights; the second, by settlement and improvement. As the result of the process of development through judicial decisions, each type of title is good against all the world except the Commonwealth, while the Commonwealth retains legal title solely for the purpose of securing payment of the purchase price. Like a mortgagee, it can realize on its lien only through execution.<sup>50</sup> If through mistake a patent is erroneously issued after such a title has been acquired to a person other than the one who has acquired the incipient title, the patentee will be held to be a trustee for, and required to convey to, the holder of the incipient title.<sup>51</sup> As against the Commonwealth, the owner of the inchoate title has a right at any time to secure a patent on payment of the purchase price and office fees, although this is a right which can be lost by abandonment.<sup>52</sup> A private title by office rights is acquired when an applicant has secured a warrant, caused a specific piece of land to be surveyed, and a return to be made. Persons had been permitted to obtain a warrant without payment of the purchase price from 1765 to 1781.<sup>53</sup> When the purchase price is deposited before issuance of the warrant, a lien will exist for the balance due, if any, resulting from the discovery that more land has been included in the survey than was estimated.<sup>54</sup> While a return of survey is the general method of acquir-

48. Act of May 5, 1899, P.L. 229; PA. STAT. ANN. tit. 64, § 503 (1941).

49. They were still open in 1933, the last year in which a detailed reference is found. [1933] PENNSYLVANIA MANUAL 196.

50. *Phillips v. Shaffer*, 5 S. & R. 215 (Pa. 1819).

51. *Hoffman v. Bell*, 61 Pa. 444 (1869); *Consolidation Coal Co. v. Friedline*, 134 Pa. Super. 1, 3 A.2d 200 (1939). Because of the doctrine that the patentee is a trustee, it is not necessary to vacate the patent and to obtain another. In declaring the trust, the court will order title transferred. It does not appear to have been decided whether or not the trustee would be subrogated to the lien of the Commonwealth for the purchase price and patent fees when he has paid them.

52. *Read v. Goodyear*, 17 S. & R. 350 (Pa. 1828).

53. SERGEANT, VIEW OF THE LAND LAWS OF PENNSYLVANIA 55 (1838).

54. Once the purchase price has been paid and all that remains secured by the lien is the office charges, the interest of a warrantee is no longer subject to abandonment. *Hoffman v. Bell*, 61 Pa. 444 (1869).

ing office rights, any other matter of record which adequately describes a specific piece of land will vest title from the moment of issue. A descriptive warrant or location, if it identifies a particular tract, will suffice.<sup>55</sup> In the case of a warrant which is not descriptive, the warrantee's title is complete from the completion of the actual survey upon the ground, even where the survey has not been returned, as the warrantee can thereafter obtain an order to have the property resurveyed and cause a return to be filed.<sup>56</sup> Persons who claim title by settlement and improvement become holders under office rights by securing a survey<sup>57</sup> or by filing a descriptive application.<sup>58</sup> Title by office right to the undrawn donation lands, which were surveyed before they were opened for appropriation, began with an actual settlement thereon.<sup>59</sup>

The second type of inchoate title is based on settlement and improvement. Recognition of rights acquired by settlement and improvement may be traced back to practices under the proprietaries. One was the practice of recognizing the rights of settlers who were actually on the land under grants from the Dutch and Swedes or from Governor Andros of New York, whose presence was aidful to the settlement of the colony. The other stemmed from a great influx of immigrants from the European continent who claimed they had been offered free lands by the agents of William Penn to induce them to settle, and who by-passed the land office in great numbers. While the proprietaries confirmed the title of the former settlers, they never recognized the legality of the latter; but they never took action to evict if the land was improved and the settler were willing to pay or to secure payment of the purchase price.<sup>60</sup> The colonial courts recognized rights of settle-

55. For a discussion of the several types of warrants, see SERGEANT, *VIEW OF THE LAND LAWS OF PENNSYLVANIA* 150 (1838). For various types of descriptive warrants, see *McDowell v. Young*, 12 S. & R. 115 (Pa. 1824), *Maus v. Montgomery*, 15 S. & R. 221 (Pa. 1826), *Lauman v. Thomas*, 4 Binn. 51 (Pa. 1811), *Davis v. Keefer*, 4 Binn. 161 (Pa. 1811).

56. A return is not necessary to establish a survey. *Lambourn v. Hartswick*, 13 S. & R. 112 (Pa. 1824). The Board of Property has jurisdiction to order a resurvey. *Simpson v. Wray*, 7 S. & R. 336 (Pa. 1821). A person not actually residing on the land would be estopped, however, as against a subsequent warrantee whose survey failed to disclose the claim. *Raush v. Miller*, 24 Pa. 277 (1855).

57. A survey without warrant was authorized for lands north and west of the Allegheny by Act of April 3, 1792, 3 SMITH'S L. 70; PA. STAT. ANN. tit. 64, § 140 (1941). A survey was also authorized without prior warrant under § 4, Act of April 11, 1872, P.L. 51; PA. STAT. ANN. tit. 64, § 472 (1941), mentioned in note 44 *supra*. The general practice, however, required the claimant to secure a warrant. Act of April 14, 1874, P.L. 58; PA. STAT. ANN. tit. 64, § 360 (1941).

58. *McDowell v. Young*, 12 S. & R. 115 (Pa. 1824).

59. Act of March 26, 1813, 6 SMITH'S L. 64; PA. STAT. ANN. tit. 64, § 192 (1941).

60. For the early history of settlement rights, see SERGEANT, *VIEW OF THE LAND LAWS OF PENNSYLVANIA* 136 (1838), HUSTON, *HISTORY AND NATURE OF ORIGINAL TITLES TO LAND IN THE PROVINCE AND STATE OF PENNSYLVANIA* 105 (1849). Lands which had not been purchased from the Indians could not be acquired by settlement, except in special circumstances. Note, 2 SMITH'S L. 124-29.

ment and improvement as sufficient to show title in the plaintiff for the purposes of an action of ejectment.<sup>61</sup> After the Revolution, the Supreme Court of Pennsylvania at first refused to recognize this doctrine, but later reversed its position.<sup>62</sup> The first statutory recognition of the rights of settlers came in 1786, when it was provided that no warrant should issue for a tract of land on which a settlement has been made except to the persons who had made the settlement or their legal representatives.<sup>63</sup> Settlement and improvement required more than a mere occupancy of the land — it required residence on the land and the raising of crops.<sup>64</sup> For the purpose of determining priority, title related back to the first occupancy, provided the occupant entered with intent to settle and improve and proceeded continuously with his improvement.<sup>65</sup> An improver acquired title not only to the land which he cleared and occupied, but also to surrounding land equal in amount to what he could have obtained by warrant — three hundred acres under the proprietaries and four hundred under the Commonwealth. A failure to enclose and survey the land within a reasonable period would, however, result in the postponement of the claim to a subsequent survey.<sup>66</sup>

Since the state had no way to account for unwarranted lands, it had no means of filing liens against such land. No doubt many settlers sought warrants in order to protect their claims against interference; but once the land was fenced, there was little danger that a subsequent survey would fail to note the existence of the claim. Land occupied by settlement and improvement was included in the county tax assessments, so that there was no local pressure to compel the settler to obtain a patent.<sup>67</sup> The General Assembly made many attempts to

61. The first reported case is *Campbell v. Kidd*, 2 SMITH'S L. 172 (Pa. 1744), which cites earlier unreported precedents.

62. *Bonnett v. Devebaugh*, 3 Binn. 175 (Pa. 1810).

63. Act of Dec. 30, 1786, 2 SMITH'S L. 395; PA. STAT. ANN. tit. 64, § 65 (1941). This applied only to land in the purchase of 1768. PA. STAT. ANN. tit. 64, § 67. An act of April 3, 1792, made provision for the survey of land for actual settlers without warrant, 3 SMITH'S L. 70, PA. STAT. ANN. tit. 64, § 360 (1941).

64. The first statute defined settlement as "an actual personal resident settlement with the manifest intention of making it a place of abode and the means of supporting a family." Act of Dec. 30, 1786, 2 SMITH'S L. 395; PA. STAT. ANN. tit. 64, § 66 (1941). This act was declaratory of the common law, which distinguished the settler from the speculator. *Bonnett v. Devebaugh*, 3 Binn. 186 (Pa. 1810).

65. The title of the settler relates back to the time of the entry and the first stroke of the axe. *Emery v. Spencer*, 23 Pa. 271, 278 (1854).

66. The period was fixed at seven years in *Farmers' and Mechanics' Bank v. Woods*, 11 Pa. 99 (1849). *Ross v. Pleasants*, 19 Pa. 157 (1851).

67. Tax liability on seated land was regarded as personal. The land could not be sold for non-payment of taxes. See SERGEANT, VIEW OF THE LAND LAWS OF PENNSYLVANIA 208 (1838). For an example of the assessment of a settlement right, see *Farmers' and Mechanics' Bank v. Woods*, 11 Pa. 99 (1849), holding that where an improver failed to return the entire tract claimed he thereby limited his claim.

compel settlers to patent their lands.<sup>68</sup> It was provided in 1899 that they should not be permitted to assert title in interference proceedings on caveat or maintain an action of ejectment without first obtaining a patent.<sup>69</sup> In 1905, it was declared that no right of settlement and improvement could be asserted unless a patent should be obtained within five years.<sup>70</sup> It soon became evident that this would affect the title of many persons who had no actual knowledge of the fact that their title was based upon settlement and improvement and not upon a patent. Before the five year period had expired, the General Assembly repealed this feature; so that it is now provided that preemption rights acquired under existing laws should not be affected.<sup>71</sup> It is now a matter of doubt whether settlement and improvement rights acquired after March 28, 1905, are valid. Even if valid, they would not extinguish the preemptive right of the Commonwealth to acquire the land for forest culture and reservation, and the lien for the purchase price would be for an amount to be ascertained by appraisal.<sup>72</sup>

At the present time, the Department of Internal Affairs is authorized to receive payment of the purchase price and costs, and to issue a patent, when title is held in one of the two ways mentioned. The price in the case of lands held by office rights is fifteen dollars, which includes both the price of the land and the fees.<sup>73</sup> This price was originally established for cases in which liens had been entered in the land lien dockets, but it has been extended to cover cases in which liens have not been entered<sup>74</sup> and cases where the lien is shown on the patent or represented by a separate mortgage.<sup>75</sup> It also covers town lots sold by commissioners.<sup>76</sup> The price in the case of lands which are held by settlement and improvement is the price at which the land was being offered for sale at the time when the settlement took place,<sup>77</sup> with interest at a rate prescribed by law.<sup>78</sup> Because of the great depreciation in the value of the dollar and the great increase in the value of land, the price would seem to be small enough to present no real obstacle to an application

68. The efforts to collect land liens generally are discussed above. See particularly note 40 *supra*.

69. Act of April 23, 1889, P.L. 46; PA. STAT. ANN. tit. 64, § 363 (1941).

70. § 5, Act of March 28, 1905, P.L. 67.

71. § 5, Act of May 3, 1909, P.L. 413; PA. STAT. ANN. tit. 64, § 327 (1941).

72. If interest is charged from the date of settlement, and the appraisal is made to relate back to that time, subsequent improvements would probably not be included in the price of the land.

73. Act of May 5, 1899, P.L. 229; PA. STAT. ANN. tit. 64, § 503 (1941).

74. Act of May 28, 1915, P.L. 571.

75. Act of April 29, 1911, P.L. 106.

76. Act of April 29, 1909, P.L. 295.

77. When the time of first improvement cannot be shown, the Department of Internal Affairs treats the settlement as having been made when the land was first opened for settlement. [1909] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. 18A.

78. Act of March 19, 1858, P.L. 132; PA. STAT. ANN. tit. 64, §§ 532-34.

for patent. The most expensive land, which was offered at eighty cents an acre, is free of interest. The general price, which prevailed from 1835 to 1905 was twenty-six and two thirds cents an acre with interest at three per cent. On a tract of land which was settled before the Revolution, interest would be calculated from March 1, 1777. As of March 1, 1957, it would cost only \$1.72 an acre to patent this land, with interest accruing at the rate of eight mills a year. This would, of course, be more burdensome to a single person claiming a large tract than to many persons claiming parcels of the original improvement.<sup>79</sup> The prices of lands are available from the Department of Internal Affairs, and are set forth in the margin.<sup>80</sup> All land other than that in which an incipient title has been acquired may be purchased at its current value determined by an appraisal,<sup>81</sup> but this does not include islands and river beds, and is subject to a preemptive right in the Department of Forests and Waters. The procedure for patenting lands will be discussed later.

In making an examination of title, it is necessary to trace title back to the patent because of the rule that the statute of limitations does not run against the Commonwealth.<sup>82</sup> By virtue of the statute of limitations, one may acquire title against a person claiming under office rights or by settlement and improvement, but the title so acquired remains subject to the lien of the Commonwealth.<sup>83</sup> It may be said,

79. The Secretary of Internal Affairs does not require that the application be for the entire tract as originally settled. *Rules of Practice of the Bureau of Land Records*, [1933] PENNSYLVANIA MANUAL 197.

80. Lands lying within the donation and depreciation districts and town lots, in which a survey preceded the allotment, would be claimed by virtue of office rights at fifteen dollars per tract, and are therefore not included in this note. Lands in the purchase of 1768 and prior purchasers are priced at twenty-six and two thirds cents per acre, with interest at 3%. Interest is charged from March 1, 1770, for lands in the purchase of 1768, and from March 1, 1755, for lands in the prior purchases. Seven years interest is remitted for the period of the Revolution. Act of March 28, 1814, 6 SMITH'S L. 207; Act of March 12, 1830, P.L. 77; Act of March 19, 1858, P.L. 132; PA. STAT. ANN. tit. 64, §§ 62, 531-34 (1941). Lands in the purchases of 1784 and 1785, except the donation and depreciation lands and the Allegheny Reserve, were offered at eighty cents per acre on Dec. 21, 1784, 2 SMITH'S L. 272. There is no interest on this price. Act of March 19, 1858, P.L. 132. PA. STAT. ANN. tit. 64, §§ 91, 532 (1941). Land lying north and east of the Ohio, Allegheny and Conewago was reduced to thirteen and one half cents per acre by Act of April 3, 1792, 3 SMITH'S L. 70. It was increased to twenty-six and two thirds cents by Act of March 10, 1817, 6 SMITH'S L. 420. Land lying north and west of the rivers mentioned above was reduced to twenty cents per acre by the Act of April 3, 1792, 3 SMITH'S L. 70. Interest was fixed at 3½% when the price was thirteen and one half cents or twenty cents, and at 3% when the price was twenty-six and two thirds cents. Act of March 19, 1858, P.L. 132. See PA. STAT. ANN. tit. 64, §§ 112, 134, 532.

81. Act of May 3, 1909, P.L. 413; PA. STAT. ANN. tit. 64, §§ 321-28 (1941).

82. *McMurtie v. McCormick*, 3 Pen. & W. 428 (Pa. 1832), *Commonwealth v. Baldwin*, 1 Watts 54 (Pa. 1832), *Schweriner v. Reading*, 19 Berks 559 (C.P., Pa. 1927).

83. *Taylor v. Dougherty*, 1 W. & S. 324 (Pa. 1841), *Galloway v. Ogle*, 2 Binn. 468 (Pa. 1810). The period of limitations is seven years when applied to land held

however, that the calculated risk of an outstanding lien is small. In the first place, judging by the slow progress in completing the connected warrantee tract maps,<sup>84</sup> the Commonwealth will not be ready to embark upon a state-wide program of enforcement within the Twentieth Century. In the second place, the amount to be collected is too small to offset the cost of collection.<sup>85</sup> On the other hand, it must be remembered that there are many interests other than the lien of the Commonwealth which are not barred by the passage of time.<sup>86</sup> The statute of limitations bars only interests which have not matured into rights of immediate possession; it would not bar possibilities of reverter and rights of entry, executory interests, restrictive covenants, minerals sold in place but not yet opened, and many like interests which may remain in abeyance for many years. The only way in which a purchaser can be certain that there are no such interests is to insist upon an examination back to the patent. The examiner who goes back sixty years to a warranty deed relies upon the warranty of a seller who probably did not know, under the practice then prevailing,<sup>87</sup> that he did not have a complete title to the land, and who may have died since the conveyance.<sup>88</sup>

To determine whether or not a patent has been granted, it may not be necessary to have recourse to the Bureau of Land Records in Harrisburg, as many patents have been recorded in the recorders' offices of the various counties. The Department of Internal Affairs is the proper office of record for all patents,<sup>89</sup> while recording in the county recorders' offices was required only in the case of patents issued subject

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under warrant or by settlement and improvement. Act of March 26, 1785, 2 SMITH'S L. 299; PA. STAT. ANN. tit. 12, § 75 (1953). *Mobly v. Oeker*, 3 Yeates 200 (Pa. 1801). After thirty years, it is presumed between all litigants other than the Commonwealth that the Commonwealth has parted with title. Act of April 27, 1855, P.L. 368; PA. STAT. ANN. tit. 12, § 79 (1953).

84. Only seventeen of the sixty-seven counties have been completed since the work was authorized in 1907.

85. It may one day become difficult to show that a settlement and improvement was commenced before March 28, 1905. See notes 70, 71 *supra*. In that case the price would be the full current value determined by appraisal. PA. STAT. ANN. tit. 64, § 327 (1941).

86. For example, a mortgage more than fifty years old which has never been in default. *Girard Trust Co. v. Pennsylvania R. R.*, 364 Pa. 576, 73 A.2d 371 (1950), holding unconstitutional an act quieting title to land after fifty years: Act of May 23, 1949, P.L. 1692; PA. STAT. ANN. tit. 68, §§ 451-57 (Supp. 1949). See Aigler, *Constitutionality of Marketable Title Acts*, 50 MICH. L. REV. 185 (1951).

87. See note 11 *supra*.

88. Unmatured claims, if not made to the personal representative, are discharged by distribution. PA. STAT. ANN. tit. 20, §§ 320.615-16 (1950).

89. All patents issued under the Commonwealth were to be enrolled in the Rolls Office. Act of April 9, 1781, 1 SMITH'S L. 529; PA. STAT. ANN. tit. 64, § 38 (1941). When the Rolls Office was abolished in 1809, the duty of enrolling patents devolved upon the Secretary of the Land Office, who was required to enroll all patents without additional fees. § 5, Act of Mar. 29, 1809, 5 SMITH'S L. 46. The duty is now expressed in general terms in the Administrative Code of 1929, § 1203. PA. STAT. ANN. tit. § 333 (1942). For exception in case of the donation lands, see note 92 *infra*.

to a lien, which was to be stated in the patent.<sup>90</sup> For all other patents, recording in the county is optional with the patentee. The connected warrantee tract maps, when available, are issued to the recorder of deeds of the county. In order to locate a patent in the Bureau of Land Records, when a map is not available, it is necessary to know the name of the original warrantee or patentee, which can be ascertained only by running the title in the county. The records in the Bureau of Land Records do not reflect changes in ownership after the Commonwealth has parted with title. When the chain of title breaks off, it is sometimes possible to pick it up again through tax assessment records. It may be possible to find the name of the original warrantee by running the title to adjoining tracts of land, in the hope that one or more of these may lead to a patent naming the warrantee of the tract in question as an adjoiner. Every effort will be made in the Bureau of Land Records to locate the patent, but it is necessary for the applicant to obtain this information in the recorder's office in the county where the land lies.

Not all patents are enrolled in the Bureau of Land Records. The patents for the donation lands were specifically exempted from recording, but a draft of the tract showing the allotment of the lands serves instead.<sup>91</sup> Some patents for land in the Allegheny and Beaver Reserve are missing from the records, although the drafts on file indicate that they have been issued.<sup>92</sup> In such cases, the records in the Bureau would seem to be sufficient evidence that title has passed from the Commonwealth, and would no doubt support an action to prove a lost deed.<sup>93</sup>

90. All patents which were issued subject to a lien for the unpaid purchase price were required to be recorded in the recorder's office of the county where the land lay by Act of Jan. 25, 1816, 6 SMITH'S L. 309; PA. STAT. ANN. tit. 64, § 416 (1941). This was chiefly for the purpose of showing the lien and facilitating collection. Patents were allowed to be recorded in the recorder's office of the county by Act of March 14, 1846, P.L. 124; PA. STAT. ANN. tit. 21, § 385 (1955). A requirement that such instruments be acknowledged was later dispensed with, but in a separate section. PA. STAT. ANN. tit. 21, § 390 (1955). See *Reilly v. Mountain Coal Co.*, 204 Pa. 270, 54 Atl. 29 (1903).

91. In lieu of recording, it was provided that a draft of the whole showing the number of each lot should be kept by the Supreme Executive Council until all applications were satisfied, and then deposited with the Master of the Rolls as a public record. Act of March 24, 1785, 2 SMITH'S L. 290. [1886-87] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. 10A.

92. [1909] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. 120A. These lots were reserved by Act of March 12, 1783, 2 SMITH'S L. 62. Power to make conveyances was originally in the Supreme Executive Council, but was transferred to the Governor by Act of Jan. 8, 1781, 3 SMITH'S L. 2, and later to the Secretary of the Land Office by Act of March 29, 1809, 5 SMITH'S L. 46. All records were deposited with the Secretary of the Land Office, and these indicate the issuance of patents by the Governor, which were not enrolled.

93. Act of March 28, 1786, 2 SMITH'S L. 375; PA. STAT. ANN. tit. 21, § 491 (1955). The act does not specifically refer to patents or to the Commonwealth as a party. There is no indication in the reported cases that it has ever been invoked for this purpose.

The failure to find a patent after a careful search of the records does not necessarily show that no patent has ever been issued. It simply means that no patent has ever been issued in the name of a person whose name has been furnished for search. It is just as possible that a patent was issued to someone not in the chain of title as that none was ever issued.<sup>94</sup> If a patent has been issued to someone else, the Commonwealth would be barred, and the present occupant's title, which may rest upon an unrecorded conveyance or on adverse possession, will have been cured by the passage of thirty years.<sup>95</sup> In such a case, it would seem to be a breach of public morality for the Department of Internal Affairs to resell the land to a person who may already be the owner. However, the probability that a patent has been issued, but cannot be found without the name of the patentee, may not be as great as it was formerly thought to be.<sup>96</sup> The completion of the maps for seventeen counties has shown that sufficient data is available to enable the Bureau of Land Records to construct a connected warrantee draft of the whole area in which the land lies, and skills and knowledge have been acquired in the process of preparing the maps which will aid in the search. If it should later be discovered that the land has been paid for twice, a refund is possible, but this would require a special act of legislation.

If a search fails to show a patent and it is determined that one should be obtained, the procedure will vary according to whether the land is claimed by office rights, by settlement and improvement, or as vacant and unappropriated public land. All unpatented land falls into one of these three categories, and may be patented with the exception of islands, land in the bed of navigable rivers, and land which the state elects to retain for forest preservation and culture. The purchase price and the basis of entitlement has already been discussed, and it remains to set forth the procedure.

Land claimed by office rights may be patented for a fee of fifteen dollars upon the filing of an application with satisfactory proof of

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94. "Often warrants and patents were granted for lands in duplication of those before granted. It is claimed by many experienced surveyors that there are large tracts of land which are covered by from two to four or five sets of surveys, the Commonwealth having been paid as many times for the lands . . . . Those who are victimized [have] no way of securing the return of the money which they have paid under the second, third or fourth official papers, without an act of the legislature authorizing a refund of the money so illegally paid and received." [1905] PA. SEC'y INTERNAL AFFAIRS ANN. REP. 22-23A.

95. The period is twenty-one years generally; but this does not bar persons under disability. Act of March 26, 1785, 2 SMITH'S L. 299. All persons are barred after thirty years. Act of April 22, 1856, P.L. 532. See PA. STAT. ANN. tit. 12, §§ 72, 73, 82 (1953).

96. See note 94 *supra*.

ownership.<sup>97</sup> The Department of Internal Affairs provides forms upon which the application is made, and has established rules of procedure.<sup>98</sup> It is necessary to show that the land for which application is made is identified in the records of the Bureau of Land Records, either by a descriptive warrant or by a return of survey. When a survey has not been returned, it may be necessary to secure another warrant<sup>99</sup> and to obtain a return by the county surveyor.<sup>100</sup> Unless there is a proper survey on the record, a patent cannot be granted. The Secretary of Internal Affairs will grant a patent for part of the original tract upon a return by the county surveyor of a survey of such part, showing the remainder of the original tract by dotted lines.<sup>101</sup> A patent will issue in the name of the original warrantee without proof of title, if he is the applicant. Other persons must support their claim by an abstract of title prepared by a competent person, or by proof of possession for the statutory period.<sup>102</sup> When ownership has been subdivided, a patent can be issued in the names of the several owners without setting forth the particular interest of each, if they join in an application.<sup>103</sup>

Land claimed by settlement and improvement can be patented upon payment of the purchase price as described earlier in this Article.<sup>104</sup> An application is made on forms supplied by the Department of Internal Affairs. The application must contain a full description of the land together with a draft, showing the names of the original warrantees of

97. Act of May 5, 1899, P.L. 229, as amended; PA. STAT. ANN. tit. 64, § 503 (1941).

98. Rules of procedure were published in the Pennsylvania Manual (formerly Smull's Legislative Handbook) through 1933. Rules of procedure were omitted in the 1935-6 volume, the statement being made instead that so far as is known, all lands in the state are now privately owned. There are currently no published rules of procedure. Reports of actual proceedings are printed in full in the Annual Reports of the Secretary of Internal Affairs.

99. Until a return of survey has been made, the Secretary of Internal Affairs may issue another warrant; but after a return has been made, only the Board of Property can order a resurvey. *Simpson v. Wray*, 7 S. & R. 337, 339 (Pa. 1821); *Mineral R.R. v. Auten*, 188 Pa. 568, 583, 41 Atl. 327, 329 (1898).

100. In many counties, the office of county surveyor has not been filled. In such cases, there is jurisdiction in the Courts of Quarter Sessions to fill a vacancy. PA. STAT. ANN. tit. 16, §§ 1001, 4001 and 7435 (1956).

101. Rule 5, [1925-6] PENNSYLVANIA MANUAL 80.

102. PA. SEC'Y INTERNAL AFFAIRS, Form 96. This form provides for an affidavit of a reputable citizen of the township and county in which the land is situated to the effect that the applicant and those under whom he claims have held the land by peaceful possession and the exercise of ownership for more than twenty-one years last past. Rule 4 of the published regulations, however, provides that when title has passed out of the original warrantee, the applicant will be required to furnish an abstract of title from the warrantee, and makes no mention of proof of adverse possession. [1925-26] PENNSYLVANIA MANUAL 80.

103. Rule 6. Rule 7 provides that any party may discharge the lien of the Commonwealth immediately, and that the patent will be issued afterward upon proof of ownership. [1925-26] PENNSYLVANIA MANUAL 80.

104. Note 80 *supra*.

the adjoining tracts.<sup>105</sup> An affidavit of a disinterested witness must be attached showing that the land is improved and how long since the improvement was made. The applicant must state under oath that he believes that no office rights have been issued for the land. If office rights have issued, he must describe them fully and state why he believes them to have been abandoned.<sup>106</sup> A false affidavit is made subject to the penalties of perjury. It is required by statute that thirty days notice of the filing of the application must be given by publication.<sup>107</sup> On receipt of proof of publication, the Bureau of Land Records calculates the purchase price on the basis of the acreage disclosed in the application, and issues a warrant to survey the land when the purchase price has been paid. The survey is then made by the county surveyor.<sup>108</sup> On return, the Secretary of Internal Affairs must determine whether the survey discloses more land than was shown in the draft, calculates the additional price and the fees, and issues a patent when these have been paid.<sup>109</sup> If there is less land returned than is shown in the application, there is no provision for the return of the excess purchase price.<sup>110</sup>

In showing entitlement to the settlement and improvement, the applicant must furnish an abstract of title from the original claimant, but it is believed that in most cases, proof of peaceable possession and the exercise of ownership for a period of thirty years will be satisfactory.<sup>111</sup> When the date of settlement is not fixed with precision, the Bureau of Land Records is compelled to assume that the settlement took place when the land was first made available for public sale.<sup>112</sup> It is also necessary to show that the settlement took place before March 28, 1905.<sup>113</sup> There are statutory definitions of settlement and improve-

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105. Rules of Practice of the Bureau of Land Records—Application for Vacant Lands. [1933] PENNSYLVANIA MANUAL 196.

106. These requirements are set forth in detail in the controlling act of April 14, 1874, P.L. 58; PA. STAT. ANN. tit. 64, 360-64 (1941).

107. Note 106 *supra*. Publication must be once a week for three successive weeks in a newspaper of the county in which the land is situate, and nearest its location.

108. The county surveyors, elective officers, replaced the deputy surveyors appointed by the Surveyor General by act of April 9, 1850, P.L. 434.

109. The fees are established by statute: for issuing a warrant and return of survey, \$5.00; for a patent of five acres or less, \$5.00; for a patent of more than five acres, \$10.00. Act of April 23, 1933, P.L. 100; PA. STAT. ANN. tit. 71, § 927.

110. [1909] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. 22A.

111. See note 102 *supra*.

112. [1909] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. 20A.

113. § 5, Act of March 28, 1905, P.L. 67, required persons having existing preemption rights to assert them within five years and otherwise provided an exclusive method of acquiring title to vacant lands. The Act of May 3, 1909, protected preemption rights acquired under existing law. See PA. STAT. ANN. tit. 64, § 327 (1941).

ment which must be shown to have been complied with.<sup>114</sup> The rules relating to joinder of parties and applications for less than the whole original tract are applicable to preemptive rights.<sup>115</sup>

When land is vacant and unappropriated — that is, when land is neither patented nor claimed by office rights or by settlement and improvement — it is available at its full current value determined by appraisal. The application is filed on forms provided by the Department of Internal Affairs, and must contain a draft of the tract showing the warrantees of the adjoining tracts. It requires an affidavit by a disinterested witness that the land is unimproved, and an affidavit of the applicant that there are no office rights outstanding, or that they have been abandoned.<sup>116</sup> The Secretary of Internal Affairs then investigates the application, searching the records in his office and making an independent survey if this seems advisable.<sup>117</sup> If the land is found to have been appropriated, the application is refused, but the refusal may be appealed to the Board of Property. If the land is found to be vacant and unappropriated, notice of the application is published at public expense.<sup>118</sup>

The Department of Forests and Waters is then notified that the land has been applied for and has been found to be vacant, and is permitted to assert the preemptive rights of the Commonwealth. If the department does not request conveyance within two months, the Secretary of Internal Affairs may proceed with the application. If the Department of Forests and Waters elects to take the land, it is patented to that department. No provision is made for reimbursing the applicant for his expenses, even where his efforts have been the only means by which the availability of the land was made known to the Commonwealth.<sup>119</sup>

When land is not claimed by the Department of Forests and Waters, the Secretary of Internal Affairs secures the appointment of

114. "Settlement and improvement rights shall only be acquired and recognized as such by an actual entry upon vacant land of the Commonwealth with the manifest intent of making it a place of abode, together with an actual improvement of the land by clearing and tilling the soil, and also defining the limits of such claim by survey and well marked lines." Act of April 23, 1899, P.L. 46; PA. STAT. ANN. tit. 64, § 363 (1941). This would, of course, exclude improvement without settlement or settlement and improvement for other than agricultural purposes or without a survey; but a survey made at the time of application would probably suffice. See *Commonwealth v. Clark*, 157 Pa. 257, 27 Atl. 723 (1893).

115. See note 101 *supra*.

116. The requirements are virtually the same as for an application to patent settled and improved lands, and are based on the Act of April 14, 1874, P.L. 58; PA. STAT. ANN. tit. 64, §§ 360-64 (1941). For regulations, see [1933] PENNSYLVANIA MANUAL 196.

117. The procedure is set out in the Act of May 3, 1909, P.L. 413; PA. STAT. ANN. tit. 64, § 321 (1941). The regulations were first formulated and are reported in [1909] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. 21A.

118. [1909] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. 21A.

119. [1933] PENNSYLVANIA MANUAL 196.

three appraisers.<sup>120</sup> The appraisers are required to visit the land, consider its location, soil, timber, minerals, fisheries and other advantages, and to place a valuation on the tract in terms of its value per acre. On the basis of this valuation and the area disclosed in the application, the Department of Internal Affairs calculates the purchase price. When this has been paid, a warrant is issued to the county surveyor, and on return of survey, it must be determined whether there is any balance due the Commonwealth by reason of excess acreage. When this is paid together with the patent fee, a patent is issued. If the applicant does not pay the purchase price within three months of the filing of the report of the appraisers,<sup>121</sup> the application is regarded as abandoned, and the land may be taken up by the next applicant at the same price.

The title to land lying in the beds of navigable rivers or of streams declared by law to be public highways does not pass to the grantee under a patent.<sup>122</sup> By an important series of decisions, this rule, which in England had been applied only to tidal waters, was extended to the fresh water rivers of the state.<sup>123</sup> Authorization to patent land lying in the beds of navigable rivers has occasionally been given by statute. At one time, the Land Office was permitted to sell the right to take coal and other minerals in river beds, provided there was no interference with navigation and rights incidental thereto.<sup>124</sup> At another time, authorization was given to patent the former beds of abandoned channels between islands and the mainland.<sup>125</sup> The granting of title to river beds has been a source of much conflict. The riparian owners have claimed that if they did not have title to the bed, they should at least have preemptive rights. In 1905, the further patenting of lands lying in the beds of navigable rivers was prohibited;<sup>126</sup> but later the power was given to appropriate channels abandoned in the improvement

120. The appraisers are appointed by the Governor, the Attorney General, the Secretary of the Commonwealth and the Secretary of Internal Affairs. They are sworn to perform their duties, and that they are not interested in the application. If they fail to act in ninety days, three other persons may be appointed. PA. STAT. ANN. tit. 64, §§ 322-23 (1941).

121. Due notice of the filing of the report of the appraisers must be given by mail to the applicant. PA. STAT. ANN. tit. 64, § 325.

122. *Carson v. Blazer*, 2 Binn. 475 (Pa. 1810). Beginning with two acts of March 9, 1771, certain streams have been declared to be public highways and commissioners appointed to undertake their improvements. 1 SMITH'S L. 322, 24.

123. *Shrunk v. Schuylkill Navigation Co.*, 14 S. & R. 71 (Pa. 1826). This meant that a corporation organized to build a dam for purposes of navigation and having the power of eminent domain, was required to pay only for the fast land taken or flowed, and was not liable to pay for the destruction of fisheries or the unhealthy conditions caused by standing water.

124. Act of April 11, 1848, P.L. 533; PA. STAT. ANN. tit. 64, §§ 262-65. The exercise of the right was not to interfere with the rights of riparian owners. See *Brandt v. McKeever*, 18 Pa. 70 (1851).

125. Act of July 15, 1897, P.L. 301. For an account of the administrative difficulties engendered, see [1899] PA. SEC'Y INTERNAL AFFAIRS ANN. REP. 17A.

126. Act of March 28, 1905; see PA. STAT. ANN. tit. 64, § 261.

of the waterways and also channels which have become blocked, giving the former riparian owners preemptive rights.<sup>127</sup> Rights of way may also be granted to municipalities and public institutions for sewage treatment plants and intercepting sewer systems for the purpose of diverting sewage and industrial wastes.<sup>128</sup>

Islands in the navigable rivers were most highly prized by the early settlers because of their level and fertile characteristics and their accessibility to transportation. It was the practice of the proprietaries to survey for themselves the islands which lay within their purchases from the Indians.<sup>129</sup> Following the Revolution, islands were withheld from sale on the usual terms and were offered instead at an appraisal which would take into account the soil, wood, fisheries, distance from the mainland, and other advantages.<sup>130</sup> In 1913, the Governor recommended in his message to the General Assembly that the state retain title to all unpatented islands, as it might want to make use of streams and islands in connection with the conservation of resources.<sup>131</sup> When his recommendation failed to produce legislation, Governor Tener carried his recommendation into effect by refusing to join in the appointment of appraisers to fix the price of islands for which applications were then pending. This practice has continued, but the statutory authority to patent islands has never been withdrawn.<sup>132</sup>

References have been made at several places to the Board of Property, which has supervisory functions over the activities of the Land Office. The Board of Property is composed of the Secretary of Internal Affairs, the Attorney General, and the Secretary of the Commonwealth.<sup>133</sup> Its jurisdiction is derived largely from that of a similar board constituted by the proprietaries, and comprises two general heads: the first, to make special orders in matters of difficulty or irregu-

127. Act of June 27, 1913, P.L. 665; PA. STAT. ANN. tit. 64, §§ 291-95.

128. Act of May 21, 1943, P.L. 304; PA. STAT. ANN. tit. 64, § 261.

129. SERGEANT, VIEW OF THE LAND LAWS OF PENNSYLVANIA 191 (1838).

130. Islands in the Susquehanna and its branches were made patentable under the Act of March 6, 1793, 6 SMITH'S L. 93. Those in the Delaware, Ohio, Allegheny and their branches were warrantable under the Act of Jan. 27, 1806, 4 SMITH'S L. 268. A minimum price of \$8.00 per acre was fixed for islands in the Susquehanna. Some further definitions and restrictions are given in an Act of April 2, 1822, 7 SMITH'S L. 594, relating to islands in the Susquehanna. Sand and gravel bars were not to be patented. Islands must be at least four feet above common low water, contain at least forty perches of ground exclusive of rocks, and be capable of producing a crop of grain or esculent root in season. See PA. STAT. ANN. tit. 64, §§ 221-35 (1941).

131. [1913] PA. MESSAGE OF THE GOVERNOR 13.

132. [1933] PENNSYLVANIA MANUAL 197.

133. The board was established by Act of April 5, 1782, 2 SMITH'S L. 13, to replace a similar board established under the proprietaries. The original membership has been changed through the years until the Secretary of Internal Affairs assumed the duties of the Surveyor General in 1874. The present membership is stated in the Administrative Code of 1929, § 406, PA. STAT. ANN. tit. 71, § 116 (1942).

larity when the powers of the Secretary of Internal Affairs are limited; and the second, to try questions of interferences.<sup>134</sup> The first heading includes power to order a resurvey or to direct the correction and return of a survey irregularly made. This jurisdiction is likely to be invoked when land is claimed under office rights which fail adequately to describe the land.<sup>135</sup> Cases of interference are brought before the board either by caveat, a writ obtained by a person wishing to oppose the granting of a patent because of a prior claim, by a return of survey showing an interference, or by the rejection of an application on the ground that the land is not vacant and unappropriated.<sup>136</sup> A person claiming title by settlement and improvement is not entitled to file a caveat unless he deposits the purchase price and makes application for the land. The purchase price is returned if he is unsuccessful.<sup>137</sup> The decisions of the Board of Property are final unless the losing party brings an action of ejectment within three months.<sup>138</sup> Persons may appear before the Board of Property by counsel, and have the right to call witnesses.<sup>139</sup>

The Land Office has one further function which has not been considered in this paper because it does not relate to the origin of private title. It is made the repository of all deeds and muniments of title to land appropriated or acquired by the Commonwealth and its agencies.<sup>140</sup> Related to this function is jurisdiction recently conferred on the Board of Property to determine all cases against the Commonwealth for lands occupied or claimed by the Commonwealth.<sup>141</sup> From decisions in such cases, an appeal lies to the Court of Common Pleas of Dauphin County sitting in Commonwealth cases. The Bureau of Land Records is also the repository of the original titles of the Commonwealth and the proprietaries, including the boundary agreements, to the extent that they have been preserved, and of many other documents of great historical interest.<sup>142</sup>

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134. Administrative Code of 1929, § 1207; PA. STAT. ANN. tit. 71, § 337 (1942).

135. See note 99 *supra*.

136. *Harper v. Farmers' & Mechanics' Bank*, 7 W. & S. 204 (Pa. 1844), *Ege v. Sidle*, 3 Pa. 115, 123 (1846). Appeal provided when the report of the Secretary concludes that land is not vacant or unappropriated, § 1, Act of May 3, 1909, P.L. 413; PA. STAT. ANN. tit. 64, § 321 (1941).

137. Act of April 14, 1874, P.L. 58; PA. STAT. ANN. tit. 64, § 363 (1941).

138. Act of April 3, 1792, 3 SMITH'S L. 74; PA. STAT. ANN. tit. 64, § 421 (1941). In order to give jurisdiction, it was further provided that the successful party would be deemed to be in possession of the property.

139. For regulations, see [1933] PENNSYLVANIA MANUAL 199. This is the last edition in which detailed regulations appear.

140. Administrative Code of 1929, § 1203; PA. STAT. ANN. tit. 71, § 333 (1942).

141. Act of July 29, 1953, P.L. 1023; PA. STAT. ANN. tit. 71, § 337 (Supp. 1958).

142. See [1957-58] PENNSYLVANIA MANUAL 317; Administrative Code of 1929, § 1203; PA. STAT. ANN. tit. 64, § 333 (1942).

One cannot undertake a study such as this without inquiring after methods for the improvement of the law. There appears to be inequality in treatment between the holders of office rights and those who claim title by settlement and improvement. Even if the fees were commuted, however, they would have to be larger in the case of improvement rights because a check of the records for interferences must be made, which is not the case with office rights. Inasmuch as it is believed that all land has been appropriated in one way or another, it would seem advisable to confirm these titles by a statute of limitations specifically barring the Commonwealth. In order to prevent the acquisition of title to lands appropriated by the Commonwealth or acquired by it, such a statute could bar only claims for the purchase price of lands appropriated before March 28, 1905, the day after which public lands could be purchased only for their full current value to be determined by appraisal. In favor of such a measure, it could be argued that the cost of maintaining the Bureau of Land Records is greater than the revenue from the patenting of lands, and that this would make it possible to close down the bureau and to transfer the records to the archives.

In reply to this suggestion, it may be said that the elimination of the patent from the chain of title will not in any way shorten the period of title search, while retention of the patent as a basic document definitely fixes the time beyond which a search need not be made. The patent should be eliminated only if a constitutional quiet title act can eliminate the need for all searches beyond a fixed period. Because such an act could not bar contingent interests which have not ripened into a right of entry, it would be either unconstitutional or ineffective. If it is found necessary to adopt a system like the Torrens system, it will be necessary to preserve the existing records in order to permit the type of title search which must precede a registration proceeding.

The recording system in Pennsylvania is sound and workable. It would be better to strengthen it than to discard it. The present machinery in the Bureau of Land Records would be greatly strengthened if the warrantee tract maps were to be completed, and the task could be accelerated if a greater appropriation were made for this purpose. In all other respects, there are adequate procedures for correcting deficiencies in original titles, and these appear to be administered efficiently.