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OWNERSHIP OF ABANDONED NAVIGABLE RIVERBEDS: TO WHOM DOES THE WINDFALL BLOW?

Tara DePuy

I. INTRODUCTION

Ownership of abandoned navigable riverbeds is an old, but largely forgotten, issue in public land law. Numerous abandoned navigable riverbeds exist in the western United States, and their number increases yearly. Some of these abandoned navigable riverbeds lie in what are now towns and cities. Others lie in the middle of landowners' fields and under their homes.¹ Yet in many states, the state rather than the private landowner obtains title to abandoned navigable riverbeds.² Following common law boundary resolution principles,³ many state statutes dictate state ownership of dry riverbeds without acknowledging possible private landowner interests in the same land.

Such statutes have unfair consequences in some instances. When a navigable river suddenly leaves its old bed, for example, and forms a new channel over a private landowner's property, the state may obtain title to the abandoned navigable riverbed by statute, and title to the new riverbed by virtue of the public trust doctrine.⁴ If no public interest remains in the old riverbed after it is abandoned, the state thus acquires what is essentially a land windfall. Equity demands a different result, particularly where private landowners lose land as a result of sudden river changes.

This comment examines some of the equitable factors that states should consider in formulating statutes which determine ownership of abandoned navigable riverbeds.⁵ Part II of this comment discusses state ownership of navigable riverbeds and applicable common law principles. Part III addresses pertinent case law on ownership of abandoned navigable riverbeds, while Part IV sets forth the equitable considerations favoring ownership of abandoned navigable riverbeds in landowners whose lands

1. Officials of the Montana State Department of Lands notified the City of Livingston, Montana in June, 1985 that the city park, city swimming pool, other city buildings and private landowners' buildings were located on a channel of the Yellowstone River that was abandoned over 60 years ago by a Civilian Conservation Corps dam project. Under MONT. CODE ANN. § 77-1-102 (1987), the state is claiming ownership of the land and is currently trying to determine where the river banks were located 60 years ago. *See infra* notes 76-78 and accompanying text.

2. *See infra* notes 70-78 and accompanying text.

3. *See generally* Comment, *After the Flood, Who Owns the Bed of the River? State Ownership Overwhelmed by the Avulsion Rule*, 60 OR. L. REV. 273 (1981).

4. *Shively v. Bowlby*, 152 U.S. 1 (1894). *See also infra* text accompanying notes 15-18.

5. The United States Supreme Court has specifically held that state boundary resolution principles must be applied to determine ownership of abandoned navigable riverbeds. *Oregon ex rel. State Land Board v. Corvallis Sand and Gravel Co.*, 429 U.S. 363, 372 (1977).

are adjacent to the abandoned navigable riverbeds. Part V surveys current state statutes on abandoned navigable riverbeds and outlines a model statute for determining ownership of abandoned navigable riverbeds.

II. STATE OWNERSHIP AND COMMON LAW PRINCIPLES

A. State Ownership

In 1842 the United States Supreme Court declared that the original thirteen states held title to all navigable waters within their boundaries and to the soil beneath them.⁶ Three years later, the Supreme Court held, under what became known as the equal-footing doctrine, that states later admitted to the Union enjoyed the same rights of sovereignty and jurisdiction over navigable riverbeds as did the original thirteen states.⁷

States hold title to navigable riverbeds in trust for the public.⁸ Under the public trust doctrine, which has developed through common law,⁹ states must manage navigable riverbeds in the public interest.¹⁰ The public trust is the vehicle courts use to protect the public's interest in navigable waterways and their beds.¹¹ Traditional public interests are defined as the trilogy of navigation, commerce and fishing.¹² In recent years, public interests under the public trust have expanded to include recreational, domestic, agricultural and municipal purposes.¹³ Public interests have changed as public needs have changed.¹⁴

State title to a navigable riverbed is as a bed to carry navigable water. For purposes of the public trust doctrine, the only public interest in the navigable riverbed is as a bed for navigable waters.¹⁵ Once the water ceases to flow over the riverbed, the public interest in the bed ceases also. In the seminal case establishing the public trust doctrine, the United States

6. *Martin v. Waddell*, 41 U.S. (16 Pet.) 367 (1842).

7. *Pollard's Lessee v. Hagan*, 44 U.S. (3 How.) 212, 229-30 (1845).

8. Comment, *supra* note 3, at 282.

9. *Illinois Cent. R.R. v. Illinois*, 146 U.S. 387 (1892).

10. A state holds title to navigable riverbeds in trust for the public under a dual form of ownership. The state owns a limited private title, *jus privatum*, which allows the state to lease or sell public trust lands as manager of the natural resources. However, the public has an inalienable right, *jus publicum*, to use navigable waterways. The state cannot lease or sell lands free of this public right. *Brusco Towboat Co. v. State ex rel. Straub*, 30 Or. App. 509, 514-21, 567 P.2d 1037, 1042-45 (1977), *aff'd as modified*, 284 Or. 627, 589 P.2d 712 (1978).

11. *National Audubon Soc'y v. Superior Court of Alpine County*, 33 Cal. 3d 419, 658 P.2d 709, 189 Cal. Rptr. 346 (1983). This case also expanded the public trust to nonnavigable tributaries of navigable waters.

12. See *Shively v. Bowlby*, 152 U.S. 1 (1894).

13. *Lamprey v. State*, 52 Minn. 181, 53 N.W. 1139 (1893). See also *National Audubon Soc'y*, 33 Cal. 3d 419, 658 P.2d 709, 189 Cal. Rptr. 346 (1983).

14. *Marks v. Whitney*, 6 Cal. 3d 251, 491 P.2d 374, 98 Cal. Rptr. 790 (1971).

15. *State v. Gill*, 259 Ala. 177, 183, 66 So.2d 141, 145 (1953); see also Note, *Artificial Addition to Riparian Land: Extending the Doctrine of Accretion*, 14 ARIZ. L. REV. 315 (1972).

Supreme Court stated that the public trust "can only be discharged by the management and control of *property in which the public has an interest . . .*"¹⁶ Arguably, the state cannot claim title to an abandoned navigable riverbed under the public trust doctrine.

Other public interests, such as a public interest in minerals below a navigable riverbed, may still exist in the abandoned navigable riverbed.¹⁷ If such public interests exist, they must be weighed against riparian landowners' interests in the abandoned navigable riverbed. Case law discussed later in this comment offers guidance in weighing these competing interests.¹⁸

B. *Common Law Principles*

To understand the relationship between common law principles regarding changes in a navigable river's course and abandoned navigable riverbeds, the term "abandoned" must be defined. Most state statutes use the term "abandoned" navigable riverbeds without defining what the term means.¹⁹

The common law definition of abandonment is not applicable to navigable riverbeds.²⁰ The common law definition consists of two elements: (1) a voluntary intent to abandon, and (2) an act or omission of action, such as relinquishment of possession or control, which carries into effect the intent to abandon.²¹ These elements presume a form of control over what is being abandoned, such as the control an owner of a water right has over water. The owner of a water right can physically control the amount of water diverted and used. The state, however, in its capacity as title owner and public interest trustee of navigable riverbeds, cannot control the amount of water in a free-flowing navigable river. The common law definition of abandonment is therefore inappropriate. The most logical definition of an "abandoned" navigable riverbed is a dry riverbed which is no longer navigable. In this comment, the common sense definition of abandonment applies.

Both natural phenomena and artificial diversions can cause an abandoned navigable riverbed.²² Federal and state common law recognize

16. *Illinois Cent. R.R.*, 146 U.S. at 453 (emphasis added).

17. Comment, *supra* note 3, at 276.

18. See *infra* text accompanying notes 48-57.

19. See *infra* text accompanying notes 70-83.

20. Common law abandonment is defined as "the voluntary relinquishment . . . [of property or a right] by its owner or holder, with the intention of terminating his ownership, possession, and control, and without vesting ownership in any other person." 1 C.J.S. *Abandonment* § 2 (1985).

21. *Id.*

22. In *County of St. Clair v. Lovington*, 90 U.S. (23 Wall.) 46 (1874), the United States Supreme Court held accretion applied to artificial changes in navigable riverbeds. *Id.* at 68. Further, in

several natural phenomena that cause a navigable river to alter its bed. These natural phenomena can be categorized according to how drastic a change they cause in the navigable riverbed. Accretion occurs when the water's flow causes a gradual and imperceptible buildup of soil in a certain place, creating dry land.²³ Erosion is the converse of accretion—the action of the water gradually removes soil from a certain place.²⁴ Dereliction, commonly referred to as reliction, occurs when the river water gradually and imperceptibly recedes to bare land without eroding or depositing soil.²⁵

A swift and sudden change in the navigable riverbed is known as an avulsion.²⁶ An avulsion occurs when a river during a flood leaves its old bed and forms an entirely new bed. An avulsion may result in an ox-bow cut, leaving a dry piece of land in between the new and old navigable riverbed.²⁷ An avulsion may also occur when a dam is built which suddenly narrows and deepens the river channel below the dam. In narrowing and deepening an existing channel, an abandoned strip may appear on either or both sides of the former navigable riverbed.²⁸

Boundary resolution principles have been developed under federal and state common law to settle disputes due to changes in navigable riverbeds by accretion, erosion, reliction and avulsion.²⁹ These principles apply whether the changes are caused by natural or artificial means.³⁰ Under federal and state common law, a riparian landowner³¹ gains title to gradual increases of land along a river caused by accretion or dereliction and, conversely, loses title to land washed away by erosion.³² However, when a sudden and perceptible change in the riverbed occurs, such as an avulsion, a riparian landowner's boundary remains the former riverbed

Bonelli Cattle Co. v. Arizona, 414 U.S. 313, 316 (1973), the Court determined a government rechanneling project resulted in an avulsion.

23. Beck, *The Wandering Missouri River: A Study in Accretion Law*, 43 N.D.L. REV. 429, 431 (1967).

24. *Id.*

25. *Id.*

26. *Id.*

27. *Id.*

28. The Supreme Court in *Bonelli* also recognized re-emergence, another natural phenomenon. Re-emergence occurs when identifiable land, once lost by erosion, suddenly re-emerges. The Court in *Bonelli* limited the use of re-emergence to a suit between a private riparian owner and the state claiming ownership to the abandoned navigable riverbed under the equal-footing doctrine. Further, the Court embraced the phenomenon of re-emergence instead of avulsion due to the limited interest of the state in the abandoned navigable riverbed. *Bonelli*, 414 U.S. at 330 n.27.

29. The boundary resolution principles apply to both riparian and prior appropriation water right states.

30. See, e.g., *Bonelli*, 414 U.S. 313 (1973); *County of St. Clair*, 90 U.S. (23 Wall.) 46 (1874).

31. For purposes of this article, a riparian landowner is the owner of land bordering a water course. See 1 H. FARNHAM, *THE LAW OF WATER & WATER RIGHTS* 363 (1904).

32. *Philadelphia Co. v. Stimson*, 223 U.S. 605 (1912).

channel.³³

The boundary resolution principles governing accretion, dereliction and erosion are fair. Title to the navigable riverbed moves with the gradual change in the riverbed.³⁴ The movement of the navigable riverbed is so imperceptible that neither the riparian landowner's nor the state's interests in the navigable riverbed are upset. However, the consequences of the avulsion boundary resolution principle can be inequitable when the principle is applied to abandoned navigable riverbeds.

The avulsion boundary resolution principle evolved to settle disputes between states having a navigable river as a common boundary.³⁵ In this context, the principle that a riparian landowner's boundary remains the same even after the occurrence of an avulsive change in a river's flow makes sense; state lines should not change with every sudden shift of a river. This avulsion boundary resolution principle was later applied to private riparian landowners.³⁶ Again, the aim was to protect the riparian landowner's reliance on the river as a boundary, and also to protect access to the river and any increase in land value due to the land bordering the river. Courts reasoned that if the boundary resolution principles of accretion, dereliction or erosion were applied, the riparian landowner would suffer a hardship because the boundaries of the land would change and the land might lose its riparian features.³⁷ However, where the state owns title to the navigable riverbed and an avulsion occurs, the avulsion boundary resolution principle may impose a hardship on the riparian landowner.

An abandoned navigable riverbed can only result from avulsion. Gradual changes in a navigable riverbed, such as accretion, dereliction and erosion, never leave a discernible dry piece of riverbed. In avulsion, when a navigable river forms a new channel across a riparian landowner's property, the riparian landowner retains title to the new navigable riverbed and the state retains title to the old, dry navigable riverbed. The riparian landowner suffers a hardship in this situation because not only is some of the landowner's land now under the navigable river, the property of the landowner is also separated by the new navigable river channel. The state, however, retains title to the abandoned navigable riverbed, and also acts as trustee for the public interest in the new navigable river channel. The riparian landowner's title in the new navigable riverbed is subject to the public interest. Further, if the navigable riverbed channel is only deepened

33. *St. Louis v. Rutz*, 138 U.S. 226 (1891).

34. *Philadelphia Co.*, 223 U.S. at 624.

35. See *Arkansas v. Tennessee*, 246 U.S. 158 (1918); *Nebraska v. Iowa*, 143 U.S. 359 (1892); *St. Louis v. Rutz*, 138 U.S. 226 (1891).

36. *Philadelphia Co.*, 223 U.S. 605 (1912).

37. *Bonelli*, 414 U.S. at 327.

and narrowed, the state retains title to the entire navigable riverbed, even though a large portion of the navigable riverbed may be dry and the riparian landowner's land now borders dry land. The riparian landowner can no longer rely on the navigable river channel as a boundary line.

The purpose of the avulsion boundary resolution principle is to define boundaries. The principle is not intended to balance public interests against riparian landowner interests in abandoned navigable riverbeds.³⁸ Yet many states have codified the common law avulsion boundary resolution principle and applied it to abandoned navigable riverbeds.³⁹ Even those states that have not codified the principle implicitly rely on it to give the state title to abandoned navigable riverbeds.⁴⁰ To reach a more just result in determining title to these riverbeds, state statutes should be drafted so that they weigh the competing public and riparian landowner interests rather than blindly follow the avulsion boundary resolution principle. Guidance in this endeavor is available from the United States Supreme Court.

III. PERTINENT CASE LAW

The Supreme Court addressed the issue of ownership of abandoned navigable riverbeds in *Bonelli Cattle Company v. Arizona*⁴¹ and *Oregon ex rel. State Land Board v. Corvallis Sand and Gravel Company*.⁴² The main focus of both cases was whether state or federal boundary resolution principles should determine ownership of abandoned navigable riverbeds. In *Bonelli*, the Supreme Court held that federal boundary resolution principles determined ownership of abandoned navigable riverbeds in the states.⁴³ The Court then reversed itself in *Corvallis*, holding that state boundary resolution principles determined ownership.⁴⁴ However, even though the main holding in *Bonelli* was overruled, the case remains important for its discussion of the factors which should be considered in equitably balancing the public trust and private landowner interests in abandoned navigable riverbeds. These factors could be incorporated into state statutes governing abandoned riverbed ownership.

38. Comment, *supra* note 3, at 280.

39. See, e.g., MONT. CODE ANN. §§ 70-18-201 and -202 (1987).

40. See *infra* note 70 and accompanying text.

41. 414 U.S. 313 (1973).

42. 429 U.S. 363 (1977).

43. *Bonelli*, 414 U.S. at 319-20.

44. *Corvallis*, 429 U.S. at 371. On remand to the Oregon Supreme Court, the result of the land ownership dispute under state law was the same as it had been under federal law, since the state and federal boundary resolution principles were the same. Compare *Oregon ex rel. State Land Board v. Corvallis Sand and Gravel Co.*, 18 Or. App. 524, 526 P.2d 469 (1974) with *Oregon ex rel. State Land Board v. Corvallis Sand and Gravel Co.*, 283 Or. 147, 582 P.2d 1352 (1978).

At issue in *Bonelli* was the abandonment of a segment of the Colorado River by a federal rechanneling project. The riparian landowner, Bonelli, had originally lost a portion of his land by erosion. Due to the rechanneling project, Bonelli's land lost by erosion re-emerged. Bonelli filed a quiet title action claiming the abandoned navigable riverbed as an artificial accretion.⁴⁵ In response, the state of Arizona claimed the change in the navigable riverbed was an avulsion which would not divest the state of its title to the abandoned navigable riverbed.⁴⁶ Ultimately, the United States Supreme Court in *Bonelli* held the abandoned navigable riverbed was an accretion that would pass to the riparian landowner under federal common law.⁴⁷

The significance of the *Bonelli* case lies in its discussion of the public trust and riparian landowner interests in abandoned navigable riverbeds. Historically, title to navigable riverbeds is held by the state as a public trust for the protection of navigation and related purposes.⁴⁸ However, the state's title to the riverbed is as a bed.⁴⁹ Further, as the Court in *Bonelli* noted, the water above navigable riverbeds held in the public trust must be primarily used for navigation and commerce and be incapable of ordinary and private occupation, cultivation and improvement.⁵⁰

The United States Supreme Court in *Bonelli* reasoned that the abandoned navigable riverbed could not be held by the state in public trust for three reasons. First, the exposed lands in *Bonelli* were capable of ordinary and private occupation.⁵¹ Second, the rechannelization project was not undertaken to give the state of Arizona title to the abandoned navigable riverbed for the protection of the public trust.⁵² Third, Bonelli, as the upland riparian landowner, did not cause the navigable riverbed to become abandoned.⁵³

In making its final decision that the abandoned navigable riverbed should be treated as an accretion, the United States Supreme Court also looked at several other equitable considerations. One equitable considera-

45. *Bonelli*, 414 U.S. at 316.

46. *Id.* at 316-17.

47. *Id.* at 329.

48. *Barney v. Keokuk*, 94 U.S. 324, 338 (1877). *See also supra* text accompanying notes 15-18.

49. The United States Supreme Court in *Bonelli* stated: "It would be at odds with the fundamental purpose of the original grant to the States to afford a State title to land from which a navigable stream had receded unless the land was exposed as part of a navigational or related public project of which it was a necessary and integral part or unless, of course, the artificial accretion was somehow caused by the upland owner himself." *Bonelli*, 414 U.S. at 322-23.

50. *Id.* at 322; *see also Shively*, 152 U.S. at 11.

51. *Bonelli*, 414 U.S. at 322.

52. *Id.* at 323. Even though title to navigable riverbeds vests in the states at the time of statehood, the operation of federal law can diminish the state's title to land formerly beneath navigable waters. *Goodtitle v. Kibbe*, 50 U.S. (9 How.) 471 (1850).

53. *Bonelli*, 414 U.S. at 323.

tion was that the rechanneling of the Colorado River had increased the state's interest in the river's navigability.⁵⁴ Before the rechanneling, the river had been too wide and shallow to be navigable. If the state were given title to the abandoned navigable riverbed, the state would acquire a land windfall, since the land was not necessary for the existence of a navigable river channel. The Court also noted that the riparian character of the private landowner's land could be destroyed at any time by the exercise of a state or federal navigational servitude.⁵⁵ Since this abandoned navigable riverbed had no public trust purpose and resulted from governmental activity, the Supreme Court held the abandoned navigable riverbed should pass to the riparian landowner as compensation for the potential loss of the riparian character of the land. The Court also noted that the landowner had previously lost riparian land by erosion.⁵⁶

Based on these equitable considerations, the United States Supreme Court held that the abandoned navigable riverbed was an accretion.⁵⁷ Thus, title to the abandoned riverbed passed to the private landowner. The Court's decision may have been result oriented. The rechanneling project on the Colorado River caused a sudden, avulsive change in the river's flow, not a gradual and imperceptible accretion. Under either federal or state common law governing avulsive changes, the state should have retained title to the abandoned navigable riverbed. However, because of the inequities of the avulsion boundary resolution principle and the requirements of the public trust doctrine that a navigable riverbed be held only as a bed, the Court was compelled to call the avulsion an accretion.

States can alleviate the inequities of the avulsion boundary resolution principle and reach a result consistent with the public trust doctrine by building flexibility into state statutes on abandoned navigable riverbeds. These statutes should provide for a balancing of private riparian landowner and public trust interest in determining ownership of abandoned riverbeds. Courts would then be less likely to reach illogical conclusions in an effort to address legitimate equitable concerns.

IV. EQUITABLE CONSIDERATIONS FAVORING RIPARIAN LANDOWNERS

The United States Supreme Court's decision in *Corvallis* leaves states

54. *Id.* at 328.

55. *Id.* at 326. Under a state or federal navigational servitude, the state or federal government may in special circumstances adversely affect private rights in navigable waterways in order to regulate the waterway. Riparian landowners are not compensated for the loss of their rights in the navigable waterway. *Philadelphia Co. v. Stimson*, 223 U.S. 605, 633-35 (1912).

56. *Bonelli*, 414 U.S. at 330.

57. *Id.* at 328.

free to develop and apply their own law to resolve disputes over ownership of abandoned navigable riverbeds. In establishing this law, states should acknowledge the equitable factors announced by the Supreme Court in its earlier *Bonelli* decision.⁵⁸ One reason states should do so is because traditional common law boundary resolution principles do not adequately account for the public trust doctrine. State common law boundary resolution principles evolved to settle disputes between the state as landowner and private landowners.⁵⁹ But in the case of abandoned navigable riverbeds, the state's primary role is as a guardian of the public trust. The public trust doctrine has evolved separately from boundary resolution principles.⁶⁰ Since conflicts over ownership of abandoned navigable riverbeds are between public trust and private riparian landowner interests, the equitable considerations discussed in *Bonelli* are directly applicable to the resolution of such conflicts.

The Supreme Court in *Bonelli* stated that, as a general rule, since states were given title to navigable riverbeds as beds to transport navigable waters in which the public has an interest, where there were no navigable waters there was no public trust interest.⁶¹ The Court qualified this general rule by stating that a public trust interest would exist in abandoned navigable riverbeds where "the land was exposed as a part of a navigational or related project of which it was a necessary and integral part or unless, of course, the artificial accretion was somehow caused by the upland owner himself."⁶² Neither of these factors were present in *Bonelli*. The Court therefore held the state of Arizona had no need for title to the abandoned navigable riverbed.⁶³ In most situations, states will not need title to abandoned navigable riverbeds to protect public trust interests.

Equitable factors favoring the riparian landowner must be weighed on a case by case basis. The Court in *Bonelli* examined three main considerations. The first consideration was that the state had increased its navigational interest in the river by dredging a deeper channel and did not need the abandoned portions of the riverbed.⁶⁴ Second, the Court noted that since the value of the riparian landowner's land stemming from its riparian

58. One commentator has noted: "A state could, however, choose to follow the principle enunciated in *Bonelli*, that when a state changes the course of a waterbody or lowers water levels so that formerly submerged lands are exposed and no navigation-related public goals remain in the exposed lands, the exposure will be treated as an accretion with a resultant transferring of title to the accreted [sic] lands to the adjacent riparian owners." Maloney, *The Ordinary High Water Mark: Attempts at Settling an Unsettled Boundary Line*, 13 LAND & WATER L. REV. 465, 485 and 498 (1978).

59. Comment, *supra* note 3, at 280.

60. *Id.* at 278.

61. *Bonelli*, 414 U.S. at 322.

62. *Id.* at 323.

63. *Id.* at 332.

64. *Id.* at 328.

character could be destroyed at any time by a state or federal navigational servitude, the riparian landowner should be favored when possible.⁶⁵ Finally, the Court considered the particular fact that Bonelli, the riparian landowner, had previously lost some of his riparian land by erosion.⁶⁶

Based on these considerations, the Court held the abandoned navigable riverbed resulted from an accretion even though in fact it was created by an avulsion. By holding the abandoned navigable riverbed was an accretion, the Court was able to consider the equitable principles underpinning the accretion boundary resolution principle. One of those principles is that riparian landowners expect their lands to continue to be bound by water.⁶⁷ Moreover, the quality of being riparian to navigable water may be the most valuable feature of the land. Riparian owners have a vested right to future accretion, and by requiring landowners to suffer the burden of erosion while giving them the benefit of accretion, the riparian characteristics are maintained.⁶⁸ Finally, since riparian landowners are at the mercy of river changes, they should receive compensation in the form of additions to their land by accretion.⁶⁹ These equitable factors underlying the accretion boundary resolution principle should be incorporated into state statutes addressing ownership of abandoned navigable riverbeds so that hardship to riparian landowners is avoided.

V. SURVEY OF STATE STATUTES

A survey of states' statutes reveals that not all states have enacted statutes addressing ownership of abandoned navigable riverbeds.⁷⁰ However, some of the states with no statutory provisions address the ownership issue through their common law.⁷¹ States should codify their laws on ownership of abandoned navigable riverbeds in such a way that public trust and riparian landowner interests are properly balanced. By building this flexibility into state statutes, state administrators and courts can reach more equitable decisions.

Existing state statutes on abandoned navigable riverbeds arbitrarily give ownership to the state or riparian landowner without adequately weighing the competing equitable concerns. For example, an Iowa statute enacted in 1904, which authorizes the sale of abandoned navigable

65. *Id.* at 326.

66. *Id.* at 330.

67. *Id.* at 326.

68. *Id.*

69. *Id.*

70. States which do not have statutes on abandoned navigable riverbeds include: Alabama, Alaska, Arizona, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Missouri, New Jersey, Oregon, Texas, Washington and Wyoming.

71. The *Corvallis* decision, 429 U.S. 363 (1977), is an example.

riverbeds, defines an abandoned riverbed as a navigable river channel no longer capable of or likely to be used for navigation.⁷² The statute seems to consider the policy behind the public trust doctrine. However, the statute assumes that title to the abandoned navigable riverbeds vests in the state. This is contrary to the public trust doctrine, which gave the state title to navigable riverbeds for public trust purposes only. The statute does not weigh the public trust interest against the riparian landowner interest to determine who should receive ownership of the abandoned navigable riverbed.

The state statutes that give ownership of abandoned navigable riverbeds to the state usually follow the common law boundary resolution principles regarding accretion, reliction, erosion and avulsion. Most of these statutes do not differentiate abandonment caused by natural phenomena from abandonment caused by artificial means. Statutes that follow the common law boundary resolution principles give the state title to the abandoned navigable riverbeds caused by avulsion. Ownership disputes normally do not arise in the case of accretion, reliction or erosion because a discernible dry navigable riverbed never exists. Any accretion or reliction automatically passes to the riparian landowner.⁷³

The Kansas statute on abandoned water courses, first enacted in 1905, is typical of state statutes which give the state title to abandoned navigable riverbeds and authorize the sale of the dry riverbeds by the state or local drainage district. The statute states:

Whenever the channel or any part of the channel of any natural watercourse shall be changed or altered by the establishment of a new channel or otherwise, so that any lands situated between the banks of such watercourse at high-water mark, the title to which is vested in the state of Kansas, shall be abandoned or no longer used for a channel, the title to such lands so abandoned for use of a channel shall immediately vest in the drainage district in which the same are situated, and such drainage district may sell, convey and give good title thereto⁷⁴

This statute does not distinguish between natural or artificial abandonment. The statute does not acknowledge either the public trust interest or the riparian landowner interest in the abandoned navigable riverbed. Consequently, this statute could undermine the public trust doctrine by allowing the state of Kansas to retain and sell a windfall of land in which

72. IOWA CODE ANN. § 568.1 (West 1946). CAL. PUB. RES. CODE § 6210.8 (West 1977) allows a state to sell or exchange land when "a navigable river . . . becomes abandoned and is no longer useful for navigation"

73. *Supra* text accompanying note 32.

74. KAN. STAT. ANN. § 24-454 (1986).

there is no public trust interest.⁷⁵

Another variation of state statutes that give the state title to abandoned navigable riverbeds under common law boundary resolution principles appears in the form of statutes that allow the state to retain title to the abandoned navigable riverbed for the benefit of school trusts.⁷⁶ The Montana statute on abandoned navigable riverbeds, first enacted in 1937, is an example of such a statute. The statute states:

All lands lying and being in and forming a part of the abandoned bed of any navigable stream or lake in this state and lying between the meandered lines of such stream or lake as the same are shown by the United States survey thereof and all islands existing in the navigable streams or lakes in this state which have not been surveyed by the government of the United States and all lands which at any time in the past comprised such an island or any part thereof, except such lands as are occupied by and belong to the adjacent landowners as accretions, belong to the state of Montana to be held in trust for the benefit of the public schools of the state.⁷⁷

Like the Kansas statute, the Montana statute does not differentiate between natural and artificial causes of abandonment. However, the statute indicates that accreted lands belonging to adjacent riparian landowners are not considered part of the definition of abandoned navigable riverbeds. Also, the Montana statute does not set forth the policy considerations in favor of state ownership of abandoned navigable riverbeds. No mention is made of the public trust doctrine or the possible riparian landowner interests in the abandoned navigable riverbed. Again, the statute compels a certain result without acknowledging sufficiently the public trust and riparian landowner interests at stake.⁷⁸

75. The Arkansas statute on abandoned navigable rivers, ARK. STAT. ANN. § 10-204 (1976), upon first glance seems to give the riparian landowner title to abandoned navigable rivers. The Arkansas statute reads:

The title to all lands which have heretofore formed, or may hereafter form in the beds of nonnavigable lakes, or in abandoned river channels or beds, whether or not still navigable, which alluvium or reformed lands are above ordinary high-water mark, shall vest in the riparian owners to said lands, and shall be assessed and taxed as other lands.

However, the statute limits riparian ownership to land above the high-water mark. A riparian owner takes title either to the low or high water mark depending on state law. Maloney, *supra* note 58, at 466. Thus, the riparian landowner gains nothing under the Arkansas law, and like the Kansas statute, the state retains title to the abandoned navigable riverbed.

76. MO. ANN. STAT. §§ 241.290, 241.300 (1952); MONT. CODE ANN. § 77-1-102 (1987).

77. MONT. CODE ANN. § 77-1-102 (1987).

78. The Montana statute may be unconstitutional under a Montana Supreme Court ruling that distinguishes the public trust from school trusts as entirely separate trusts in the case of water rights. *Pettibone v. State*, ___ Mont. ___, 702 P.2d 948, 955 (1985). The issue is whether public trust lands can arbitrarily be given to the school trust even though the two trusts are not based on the same principles.

State statutes that give riparian landowners' title to abandoned navigable riverbeds do so usually in the case of avulsion and as a means of compensating the riparian landowner whose land is submerged beneath the new navigable river channel. For example, the statutes from North Dakota,⁷⁹ Oklahoma,⁸⁰ and South Dakota⁸¹ have essentially identical language as follows:

If a stream, navigable or not navigable, forms a new course, abandoning its ancient stream bed, the owners of the land newly occupied take by way of indemnity the ancient stream bed abandoned, each in proportion to the land of which he has been deprived.⁸²

These statutes follow the Roman law that state title to navigable and nonnavigable riverbeds follow the active course of the river.⁸³ The statutes are favorable to riparian landowners because the riparian landowners are given title to abandoned navigable riverbeds as compensation for losing land to new navigable river channels. However, these statutes fail to account for any possible public trust interest in the abandoned navigable riverbed that may exist.

A model statute that weighs the riparian landowner and public trust interests in abandoned navigable riverbeds may read as follows:

When a navigable river or stream abandons its bed, leaving the former bed wholly or partially dry, either by natural or artificial causes, and there is no longer an identifiable public interest, as defined by the public trust, in the abandoned navigable riverbed, the owner of the land on which the new navigable riverbed is located shall take as compensation the abandoned navigable riverbed. The state shall receive title to the new navigable riverbed. If the river returns to the old bed, each shall take his or its former land.

The model statute precisely defines abandonment and its causes, but more importantly, the model statute allows flexibility in weighing the public trust and riparian landowner interests in the abandoned navigable riverbed. If an identifiable public trust interest in the abandoned navigable riverbed does not exist, the riparian landowner becomes its owner. By leaving the definition of "public trust interest" undefined, the statute encompasses new public trust interests that may develop in the future.

79. N.D. CENT. CODE § 47-06-07 (1978). North Dakota's statute was enacted in 1877.

80. OKLA. STAT. ANN. tit. 60, § 340 (West 1971). Oklahoma's statute was enacted in 1890.

81. S.D. CODIFIED LAWS ANN. § 43-17-11 (1983). South Dakota's statute was enacted in 1877.

82. *Id.*

83. Louisiana, in its statute on abandoned navigable rivers, and Texas, through its common law, also follow Roman law which states that title to navigable riverbeds follows the active course of the river. See LA. CIV. CODE ANN. art. 504 (West 1972); *Maufrais v. State*, 142 Tex. 559, 180 S.W.2d 144 (1944); *Manry v. Robison*, 122 Tex. 213, 56 S.W.2d 438 (1932).

However, as the Supreme Court in *Bonelli* pointed out, the public trust interest in navigable riverbeds is as a bed only.⁸⁴ Unless the abandoned navigable riverbed was exposed for a navigational project for which the abandoned navigable riverbed is necessary, or the abandoned navigable riverbed was caused by the riparian landowner, no public trust interest exists in the abandoned navigable riverbed.⁸⁵ Thus, in the usual situation the abandoned navigable riverbed will pass to the riparian landowner.

The model statute has several practical hurdles which must be overcome in order for the statute to work effectively. Survey and appraisal fees will be incurred, since adequate compensation to the riparian landowner for land lost to a new river channel will depend on an accurate measurement of both the land lost and land gained in the form of an abandoned navigable riverbed. Who pays these fees must be decided. Furthermore, determining the public trust and riparian landowner interests at stake will require an evidentiary hearing. Ideally, this hearing should take place in an administrative forum so that costly court litigation could be avoided. Once the practical details are resolved, the model statute would be a meaningful guide to a fair determination of ownership of abandoned navigable riverbeds.

VI. CONCLUSION

The United States Supreme Court has left states free to develop and apply their own boundary resolution principles. Given this opportunity, states should formulate their statutes on abandoned navigable riverbeds in such a way that the statutes fairly balance both public trust and riparian landowner interests. The state should be able to show that a public trust interest remains in the abandoned navigable riverbed which compels state ownership. But if no public trust interest remains, the riparian landowner should take title to the dry riverbed as compensation for land lost to the new bed of the navigable riverbed. This statutory flexibility would help prevent unfair land windfalls to the state.

84. *Bonelli*, 414 U.S. at 322.

85. *Id.* at 322-23.