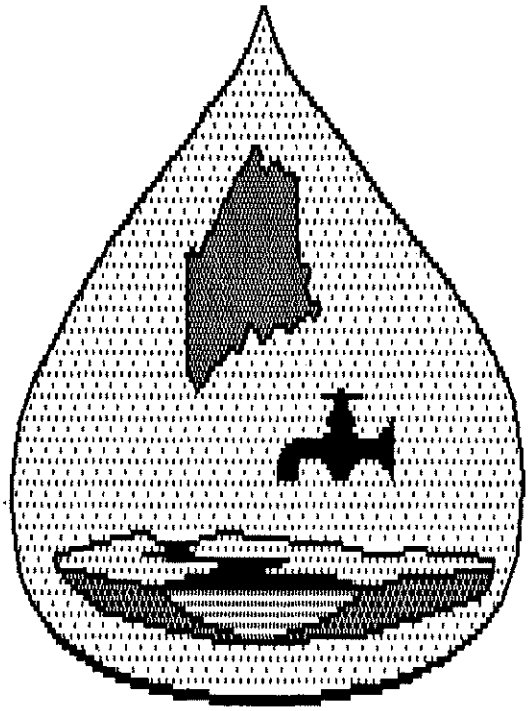
WATER LAW IN MAINE



REPORT OF THE LEGAL FRAMEWORK SUBCOMMITTEE

MAINE WATER RESOURCES MANAGEMENT BOARD

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MAINE WATER RESOURCES MANAGEMENT BOARD

December 27, 1990

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CONTENTS

INTRODUCTION 1

DESCRIPTION OF MAINE WATER LAW 2
THE COMMON LAW OF SURFACE WATER 2
The Riparian Doctrine of Surface Water 2
Prescriptive Rights 4
Waters Subject to Riparian Rights 4
Non-tidal Streams and Rivers (5); Great Ponds and Tidal Rivers (5); Navigable Waters (5); Artificial Watercourses, Springs and Subsurface Streams (6)
Use of Surface Waters 7
Determining Reasonable Uses 7
THE COMMON LAW OF GROUNDWATER 10
WATER LAW RELATING TO USE BY PUBLIC WATER SUPPLIES 11
MAINE STATUTORY MODIFICATIONS TO THE COMMON LAW 12
Source of State Authority 12
General Provisions 12
Rivers and Streams 13
Great Ponds 13
Groundwater 14
Municipalities 16

HOW MAINE'S CURRENT WATER LAW RELATES TO CONCERNS ABOUT WATER RESOURCE MANAGEMENT 17

STATE RESPONSES TO WATER RESOURCE MANAGEMENT ISSUES 20
Conjunctive Management of Surface and Groundwater 20
Determining Allowable/Reasonable Use 21
State-wide Planning and Management 22
State Registration/Permitting of Surface and Groundwater Withdrawals 22
Pre-existing water uses and the "Takings" Issue 23
Diversions from Water Basins 24

LITERATURE CITED 29

MAINE CASES RELATING TO WATER RESOURCE MANAGEMENT 30

OTHER RELEVANT READINGS 30

APPENDIX A **Public Laws Relating to Water**

APPENDIX A - 1 **Public Laws Relating to Groundwater**

APPENDIX B **Public Water Suppliers Chartered or Regulated by State Agencies**

WATER LAW IN MAINE - 1990

INTRODUCTION

The purpose of the Legal Framework Subcommittee's work has been to achieve an understanding of the legal framework for water resource management presently and determine necessary changes in the legal foundation for a future management system. The focus of this work, and this report, is not on depicting the all-inclusive body of water law as it may relate to Maine. Rather, it is on identifying key legal concepts and principles relevant to the Water Resources Management Board's mission of finding ways to improve the State's institutional structure of water resource management.

The body of water law in the eastern U.S. has evolved, gradually, to meet the changing needs of society and to reflect a better understanding of the laws of nature. The common law of water in the east has not undergone catastrophic change since the beginning of our nation. But, as a result of cases resolved over time, it is now something quite different from what our founding fathers knew. Many recent statutes have significantly modified the common law in Maine and other eastern states. We should expect additional changes in the future in response to emerging societal needs, pressures on the resource base and improved information on the resource base. In this light, the Legal Framework subcommittee has attempted to identify ways Maine law might be further clarified or modified to better meet our public objective of responsible water resource management.

This report is organized in three general parts. The first part provides a description of present Maine water law - a foundation of common law modified in diverse ways by judicial and legislative actions. The second part of the report provides an analysis of the adequacy of current law in the context of today's water management needs and those to be expected in the future. The third part identifies possible options the State of Maine might choose in response to shortcomings in the common law that would provide for an appropriate water management strategy. Of particular note, this report and its appendices provide: 1) a review of the methods by which water rights are obtained under the existing law; 2) a catalogue of "publicly granted water rights"; and 3) an analysis of diversion policy. These items are provided in partial fulfillment of the Board's mandates outlined by the Board's Statute (see: 5 MRSA Part 15-B).

PART ONE
DESCRIPTION OF MAINE WATER LAW

THE COMMON LAW OF SURFACE WATER

Laws governing surface and groundwater in Maine have developed largely as a result of court decisions, often described as common law. Many of their precepts date back to early Roman and Greek societies, but by and large, the body of legal water doctrine we have today was established in England several centuries ago and handed down by virtue of Massachusetts statutes prior to our statehood.

Two of the earliest legal characterizations of surface water are the concepts of *res communes* or *res nulles* and *publici juris*, both derived from Roman Law (Tarlock, 1990). Both of these concepts are fundamental to water law today. *Res communes* or *res nulles* refers to objects which cannot be privately owned - no one can obtain title to a body of water itself, but only the privilege to use the resource. This distinction is frequently termed as the difference between "usufructuary rights" and a proprietary interest. This concept describes the incomplete nature of private property rights to water, limited to the ability to use - not own - the surface water resource itself. The term *publici juris* refers to the fact that water is owned in trust for the public. *Publici juris* defines the interest of the public as a whole in the ownership and, hence, the management of water resources. Because private water rights are qualified (*res communes*) and there is a public interest and rights in the water resource (*publici juris*), the state may regulate the use of the resource for the public good - statutes can always modify the common law.

The Riparian Doctrine of Surface Water

Two fundamentally different surface water allocation doctrines have developed in the United States; the Appropriation Doctrine, developed in the western United States in areas where water is scarce, and the Riparian Doctrine, inherited from England and developed largely in the eastern United States when water was abundant throughout these areas. Under an appropriation system, priorities of water use are established according to earliest use - the first appropriation of water has a prior right. In times of scarce supply, the most recent appropriations will be the first deprived of water regardless of the comparative benefits of the uses. The doctrine may provide for modification or loss of prior appropriation rights where they have ceased to be used or where a portion or their use is attributable to waste. Appropriation rights are generally limited to beneficial uses and do not include the waste of water.

Riparian systems are found where water has been abundant and conflicting uses infrequent, generally in the Eastern United States. The term "riparian" stems from the Latin word, *ripa*, which means river bank. The riparian rights doctrine relates to something on or relating to the bank of a natural course of water. To qualify as riparian, land must be in contact with a watercourse. Riparian rights depend on ownership of the bank not the bed of

the watercourse. Any entity capable of owning land (eg., a person, a corporation, a unit of government) can be a riparian possessing an interest in riparian land (Tarlock, 1990). If two watercourses are naturally connected, a riparian in one has riparian rights in the other.

Rights to surface water (lakes, ponds, rivers, streams, etc.) belong to the land holders who abut these bodies of water. These rights include the right to use the water for domestic purposes, including irrigation, to make impoundments for water power, to wharf out (to build docks or piers for the purpose of navigation or other riparian pursuits), to use the surfaces of lakes and streams for fishing, hunting and other forms of recreation, to enjoy the view over the water and to take title to accretions (deposits of land along the owner's shoreline) (Tarlock, 1990).

Maine is a riparian rights state which acknowledges the qualified rights of an owner of property bordering a body of water to have access to and make reasonable use of that water and enjoy the use and benefit of that water for all purposes to which it can be reasonably applied. Kennebunk, Kennebunkport, and Wells Water District v. Maine Turnpike Authority, 145 Me. 35 (1950); In re: Opinions of the Justices, 118 Me.503 (1919); and Stanton v. Trustees of St. Joseph College, 233 A.2d 718 appeal after remand 254 A.2d 597 (Me. 1967). The riparian does not own the water. Kennebunk, Kennebunkport, and Wells Water District v. Maine Turnpike Authority, 145 Me. 35 (1950). Riparian rights, therefore, essentially consist of a bundle of water use rights and privileges, not inclusive of actual ownership of the water, and subject to all other riparian uses. Like other property rights, these interests are subject to eminent domain, which is the power of the state to take private property for public use (Tarlock, 1990).

Riparian rights to use water are shared more or less equally by all riparian owners. With the possible exception of domestic uses, all riparians have equal rights without regard to who was there first. For example, one Maine court indicated that, "for each of two persons, (who have each) erected a mill on riparian land abutting the same stream (which only has water sufficient to drive one mill), neither acquires a priority of right by first erecting his mill; each has an equal right to use the water." Bailey v. Rust, 15 Me. 440 (1839). Essentially, riparians have a right to reasonably use the water relative to the similar rights of other riparian owners. Stanton v. Trustees of St. Joseph College, 233 A.2d 718 appeal after remand 254 A.2d 597 (Me. 1967).

Riparian water rights are described as real property rights which are "incorporeal" (not of objective, material, or perceptive existence) rather than "corporeal" (Tarlock, 1990). Since riparian rights are relatively intangible, and cannot be directly quantified, it is difficult to allocate or to buy and sell water rights within a pure riparian system. Quantities of riparian water cannot be "administered" among the riparian users by a public agency in the same way quantities of use are allocated in appropriation states. However, riparians are able to contract among themselves to apportion water; so long as there has been an express (written) agreement among all affected riparians (Tarlock, 1990). Riparian rights may be regulated by the so-called "police power", which is the power of government to establish laws and ordinances for the promotion of public health, safety and welfare.

Riparian rights are not subject to abandonment. They do not depend on actual use and therefore are not lost by nonuse, no matter for how long a time. Non-using riparians can begin use at any time even though others on the stream may consequently have to reduce their diversions. Thus those who invest large amounts in water projects in reliance on continued nonuse by other riparians take a substantial risk where water is not in abundant supply (Delogu, 1969).

Prescriptive Rights

Like other property, water rights may be lost through prescription to riparians or, in certain cases, even to non-riparians. Prescription can occur in the event of a use or possession of the property rights by another which is open, notorious, continuous, peaceable, and over a period of time as specified in law. To establish prescriptive rights the use must be "hostile to the enjoyment" that is, not in the interest of the rights of the title holder. Since a hostile use is by definition an unreasonable use it is difficult to establish prescription where the doctrine of reasonable use is followed. Where natural flow theory of the English Rule prevails, which is rarely the case today, prescription would be more feasible (Tarlock, 1990). [Note: a more thorough description of the reasonable use and English Rule doctrines follows].

Prescriptive rights in artificially high lake levels have been claimed by riparians in some states (as claims of reciprocal negative easements to prevent lowering of the lake). However, under prescription these claims may be subject to challenge because the use and enjoyment of the higher lake levels would likely not be adverse. Nevertheless, prescriptive rights to such things as water levels could be argued based on the nature of expectations of use and enjoyment of the watercourse (Tarlock, 1990).

Waters Subject to Riparian Rights

Not all surface waters are subject to riparian rights. Generally, watercourses (those with definite natural channels, with beds and banks) fall under the riparian doctrine, but diffuse surface waters (storm waters) and drainage depressions do not. Tarlock (1990) cites the following definition of watercourse subject to riparian rights:

> "It has been stated that surface water becomes a natural watercourse at the point where it begins to form a reasonably well defined channel, with a bed and banks, or sides and current, although the stream itself may be very small and water may not flow continuously. So, while the term 'water course' does not ordinarily include water descending from hills, down hollows and ravines, only in times of rain and melting snow, yet where water, owing to the hilly and mountainous configuration of the country, accumulates in large quantities from such courses, and at regular seasons descends through long, deep gullies or ravines on the land below, and in its onward flow carves out a distinct and well-defined channel, which bears the unmistakable impress of the frequent action of running water, and through which it has flowed from the immemorial, such stream constitutes a water course and is governed by the rules applicable thereto." Winters v. Berca College, 349 S.W.2d (Kentucky 1961).

Under Maine Law, riparian waters include tidal waters, lakes and ponds, streams, brooks and rivers. Brown v. Chadbourne, 31 Me. 9 (1849); In re: Opinions of the Justices, 118 Me. 503 (1919); Card v. Nickerson, 150 Me. 89 (1954); and Kennebunk, Kennebunkport, and Wells Water District v. Maine Turnpike Authority, 145 Me. 35 (1950)].

Non-tidal Streams and Rivers

In Maine, riparian owners on non-tidal streams own the bed of the stream. Unless excluded by the grant of property itself, a riparian owner on a stream owns to the thread (middle) of the stream if the land borders the stream on one bank and owns the entire bed where the land owned encompasses both banks. Riparian stream owners do not own the waters themselves, but have the right to the reasonable use of its natural flow. Subject to the right of other riparians to pass and to fish, non-tidal rivers and streams are private. In re: Opinions of the Justices, 118 Me. 503 - 506 (1919), and cases cited therein.

Great Ponds and Tidal Rivers

In great ponds and tidal rivers, the bed and the water are held by the State of Maine as a public trust and the State may grant permission for use of the water. As a result of the Colonial Ordinance of 1641-47, great ponds (10 acres or more in a natural state) are subject to control by the State under its public trust in those waters. Title to the bed of great ponds and tidal waters below the low water line rests in the State. Individuals owning property on the great ponds own to the low water mark; have a right of access to the pond for bathing, boating, fishing, fowling, agriculture and domestic uses; but may not, without legislative authority, draw upon the waters of the pond below its natural low water mark. In re: Opinions of the Justices, 118 Me. 503, 504 (1919), and cases cited therein. In other words, they have reasonable use rights of the surface water.

Navigable Waters

Generally, navigable rivers are impressed with a number of public servitudes (limitations relating to their use) to which private riparians are subjected (Tarlock, 1990). Under common law, piers and wharfs can only extend far enough out to reach navigable water. There are also common law limits to filling wetlands in navigable waters. Under the "navigational servitude", access to navigable waters by riparians can properly be cut off - pursuant to the public trust in the navigable waters. The sovereign (ie.the state) can build structures, such as bridges and wharfs which cut off access, if the structures are determined to be in the public interest (Tarlock, 1990).

For example, a mill operation along a protected coastal cove in Washington County, Maine was severely interfered with, and perhaps eventually put out of business, by construction of a railroad trestle permitted by the U.S. government across the cove. The trestle completely cut off the mill's access to the navigable waters outside the cove. The mill operator was not able to receive damages for this loss. The Maine Law Court held that navigation and access via navigable waters is a public right shared by everyone and not a

private right of any individual. Therefore, regardless of the extent of injury, an individual has no cause for damages due to actions by the sovereign which restrict access on navigable waters, so long as the action is done for a public purpose. Frost v. Washington County Railroad Company, 96 Me. 76, 51 A. 806 (1901). Although in Maine the trust doctrine has been said to impose some duties on the state to actively protect the public rights of access to assure the water's availability for public use, the state legislature can choose to relinquish those public rights, in whole or in part, for another public purpose. State v. Leavitt, 105 Me.76, 72 A. 875 (1909); Mullen v. Penobscot Log Driving Co., 90 Me. 555, 38 A. 557 (1897); and Moor v. Veazie, 32 Me 343 (1850).

The cases cited above are relatively old and there is some possibility that, today, a constitutional "takings issue" might be successful (based on the Fifth Amendment to the constitution which prohibits taking of property without just compensation). This is, in part, because the uses of these waters, and the relative importance of those uses to society have changed since the mid-1800's. Another key issue for cases such as these is the extent and occurrence of reciprocal public benefit - the legislature cannot relinquish public water rights for nothing.

Artificial Watercourses, Springs and Subsurface Streams

Artificial watercourses, springs and subsurface streams are discussed briefly below because they are types of waters which receive treatment under the law that varies somewhat from that of other water resources. However, in the scope of Maine water law, doctrine relating to these types of resources has been less remarkable than that of other states. There simply has been little cause for litigation regarding rights associated with these resources in Maine.

As a technical matter, riparian rights are not ordinarily attached to artificial water courses although in many cases they can be. Generally there is no common law right to continuance of a water course in its artificial condition. However, exceptions may be made where the particular character of an artificial or artificially modified water body and circumstances surrounding its use give rise to reasonable expectations of riparian rights and uses. An artificial water course may be considered "natural" over a usually long time depending upon: whether the water course is temporary or permanent; the circumstances of its creation and; the mode in which it has been used or enjoyed by people. The critical question seems to be whether surrounding landowners have come to treat the artificial watercourse as part of the landscape and have adjusted their behavior and expectations accordingly (Tarlock, 1990).

In determining whether riparian rights apply to springs, some states have distinguished between those which are sources of watercourses and those which are not, the former being subject to riparian rights (Tarlock, 1990). In all Maine case history springs are associated with defined watercourses.

Riparian rights attach to subsurface streams - channels which actually flow underground and are quite rare. Since subsurface streams are unusual, riparian jurisdictions usually place the burden upon the party asserting riparian ownership to prove that the underground stream exists (Tarlock, 1990).

Use of Surface Waters

The law pertaining to the use of surface waters in Maine is somewhat confusing, primarily for two reasons. First, it would seem to the casual observer that application of the common law has been traditionally inconsistent. Under the so-called "English Rule" or "natural flow theory", which most eastern states followed in the nineteenth century, no one had the right to diminish the quantity of water which would naturally flow to a downstream proprietor. Yet, according to court decisions of those times in Maine and elsewhere, there could, in a very limited way, be a "reasonable diminishment" of the water. While rulings in favor of "reasonable diminishment" probably made the most sense in terms of the realities of riparian needs, they contradicted strict application of the English Rule doctrine.

Over time, the vast majority of riparian states have abandoned the English Rule, and have embraced the doctrine of "Reasonable Use", also called the "American Rule". In fact the literal interpretation of the English Rule exists almost nowhere in the United States today. This change happened primarily in response to the impracticality of the natural flow theory to the water needs of a growing industrial society. Under the reasonable use doctrine, each riparian is entitled to reasonable use for beneficial purposes, not necessarily limited to traditional domestic and agrarian uses. Private landowners abutting public waters can exercise their riparian rights, subject to the rights of the public.

The second reason for some confusion in Maine law is that, like only a few other states, Maine has not categorically abandoned the English Rule, but has done so implicitly by interjecting reasonable use concepts within its body of water law almost since the beginning of its statehood. Blanchard v.Baker, 8 Me. 253-268 (1832). For all practical purposes, Maine has become a "reasonable use state", but vestiges of the English Rule are reflected in the language of court decisions. An example of this mix of language appears in a holding that, "downstream riparian owners, have certain rights to the waters of a stream unchanged in quantity and quality [English Rule], except by reasonable riparian uses of other riparian owners [reasonable use rule]". Stanton v. Trustees of St. Joseph's College, 254 A.2d 600 (Me. 1969).

Determining Reasonable Uses

Under the reasonable use rule, allocation of water is governed by a somewhat subjective "reasonableness" standard. *Absent any guidance through legislation,* reasonableness of any particular use is considered by courts to be a question of fact on a case-by-case basis. In determining reasonableness of a proposed use the courts generally consider the size, character and natural state of the watercourse; the type and purposes of the

proposed uses and effect on the watercourse; and balance the benefit to the proposed user with the injury to other riparians (Tarlock, 1990).

Maine courts have judged that there is no fixed rule of reasonableness. Whether a use is reasonable depends upon the facts and circumstances of each case, including the nature and manner of use of land by a riparian proprietor and the use made by downstream proprietors of their land and waters of the stream, the size and character of the stream, the purposes to which it is or can be applied, the nature and importance of use claimed and exercised by one party, and the inconvenience and injury to the other. Lockwood v. Lawrence, 77 Me. 297 (1885); and Kennebunk, Kennebunkport, and Wells Water District v. Maine Turnpike Authority, 145 Me. 35 (1950).

Based on court decisions throughout the eastern United States, some uses, such as transport of the water off-site from the riparian land or draining a public wetland that serves as wildlife habitat have been generally found unreasonable relative to other riparian uses. Other uses, including typical domestic uses such as washing, drinking, irrigation, watering livestock and recreation have consistently been determined reasonable uses. Flood control projects, storage reservoirs, irrigation, oil and gas extraction, power generation, recreation, scenic viewing and wild rice harvesting are among the various uses which have been tested and found to be reasonable by some jurisdictions. One may argue that with a few obvious exceptions, under the subjective test of reasonableness, almost all uses of water are potentially reasonable (Tarlock, 1990).

Under reasonable use, a riparian has a right to impound or divert a watercourse (usually to be returned unchanged at some downstream point), but may be limited by the correlative rights of downstream owners which would imply equal sharing in times of water shortages. Correlative rights are those which are shared mutually; the existence of one's riparian rights necessarily implies the existence of those same rights for other riparians. In Maine, riparian proprietors may use water for manufacturing and industrial purposes, if water is not thereby unreasonably detained or essentially diminished, and may build dams on their land subject to the provisions of the Mill Act and to payment of damages for all flowage caused. Central Maine Power Co. v. Public Utilities Commission, 156 Me. 295 (1960). Generally dams are considered reasonable uses, so long as a dam is operated in a careful and prudent manner. Maine courts have found that where a dam owner is not negligent, the owner is not liable to lower riparian owners for damages due to flooding unless the dam owner has committed some act shown to be wrongful as against another riparian owner. Michalka v. Great Northern Paper Co., 151 Me. 98 (1955).

While the use of a dam facility can affect riparian uses, for or many old, non hydropower dams, upstream and downstream riparian rights can be jeopardized by lack of continued maintenance of the dam structures. It is not clear to what extent the owners of these dams, or the state are responsible under the common law to maintain dams in order to prevent diminution of legitimate riparian interests.

Under natural flow theory there is no inherent right to pollute. But under the reasonable use rule, the need of a riparian to discharge waste is balanced against the needs of other riparians to determine reasonableness (Tarlock, 1990). In Maine, the courts have held, on one hand, that the riparian owner of a navigable stream has an interest in the

preservation of the quality of its water which is a private right. Yet, on the other hand, downstream riparian owners have rights to the waters of the stream unchanged in quantity and quality, except by reasonable riparian uses. Stanton v. Trustees of St. Joseph's College, 233 A.2d 597 (Me. 1967). Any presumption for pollution would be preempted by the Federal Clean Water Act. Essentially there is never a "right to pollute", but reasonably-used water may be somewhat diminished, but not below water quality standards, before it returns to the stream.

Under the common law enforcement of restrictions on unreasonable uses is the role of the other riparians. Consequently, an unreasonable use could continue unless another riparian was injured and brought suit.

Reasonable uses may also be designated or defined by state legislatures (Tarlock, 1990). In recent years, a number of eastern states have chosen to define "reasonable use" by statute. States have done this primarily to eliminate uncertainty associated with case-by-case court determinations, and to establish public preferences and policies regarding water uses in a legislative rather than an adjudicatory arena in hopes of achieving more carefully thought-out and balanced policies in advance of disputes. This is also done to provide guidance to the courts in determining whether a use of water is unreasonable (e.g., see Second Restatement of Torts §§ 850 and 858).

THE COMMON LAW OF GROUNDWATER

In almost all eastern states the riparian rules which apply to surface waters and flowing underground streams do not apply to percolating groundwater (Tarlock, 1990). The term, "percolating water" includes that in aquifers - geological formations which contain water. Similar to the law applying to surface water, Maine's law relating to percolating water has been what is called "English Rule", but the principles which apply to riparian rights are wholly inapplicable to percolating waters. Chase v. Silverstone, 62 Me. 175 (1873). The English Rule regarding groundwater is also referred to as the "rule of capture" in that one who owns the overlying land has the unqualified privilege to extract the water below. Under the "English Rule" relating to groundwater (also called the "rule of capture"), one who digs a well on his land in good faith to obtain water for domestic use is not liable for diversion of surface or groundwater from an adjoining landowner (Tarlock, 1990). According to Chase v. Silverstone, the owner is considered to have an absolute right to intercept groundwater before it leaves his land. In the absence of any grant, agreement, statute or regulation to the contrary he would be liable only if that individual maliciously cut off another's supply and, perhaps not even then if his use is beneficial.

Chase v. Silverstone, adopted the "Rule of Capture", relating to groundwater which remained unchallenged in either Maine's highest court or the legislature for over one hundred years (Trafton, 1977). However, recent legislation relating to groundwater and the Maine Site Location of Development Law has asserted a public interest in the protection of groundwater resources and entitles court action to any overlying landowner whose domestic use of groundwater has been damaged by another's non-domestic withdrawal from that same source (see section on Statutory Modifications, below). But, arguably, even if such damage occurs, the non-domestic user is entitled to use all the groundwater under the common law.

Most other eastern states have adopted a "reasonable use rule" relating to groundwater. The reasonable use standard of groundwater resembles the American Rule or reasonable use rule doctrine of surface waters in that it requires a withdrawer's use be reasonable and beneficial, in view of similar rights of others. Whether he is immune from liability stemming from his use of the groundwater depends on whether his interference was reasonably necessary. Yet, the statute provides no guarantee or presumption that the damages will actually be sustained.

Even in Maine, strict English Rule has long been clarified to limit pollution of groundwater. In a case where an individual placed a manure pile too close to his neighbor's well, a Maine court determined that "a person should not place nor negligently allow a deleterious substance to remain where the useful waters of another may be corrupted...". Woodward v. Aborn, 35 Me. 271 (1853).

WATER LAW RELATING TO USE BY PUBLIC WATER SUPPLIES

Under common law, municipalities are afforded few favors with respect to water rights. They have no greater or lesser legal interests in surface and groundwater than any other landowner in the area, and use of water to supply the public has not been considered a reasonable riparian use which can be considered a riparian right (Tarlock, 1990). Water utilities, or Districts are either investor-owned companies or municipally-owned or affiliated districts, most of which serve by virtue of charters granted by the Legislature. However, they are not required to have charters and some municipal water departments operate under their respective municipal charters, rather than under special water use charters by the Legislature. About 142 water use charters currently exist in Maine. There are two types of these charters: those granting access to a great pond for water supply; and those that empower the utility to take water from other surface and underground sources. The latter represents the vast majority of Maine charters. Appendix B provides a full listing of legislative charters and public water suppliers regulated by the Department of Human Services, Health Engineering Division.

Charters establish a governmental or quasi-governmental agency empowered to distribute water taken from a defined geographic area to a defined service area. Except in the cases of some great ponds, most charters allow for withdrawals from any source within the defined geographic area; the exact watercourses or aquifers of withdrawal are rarely designated. None of the current charters in Maine limit the amounts of water which may be withdrawn by the district or utility.

In granting charters, the Legislature has at least implicitly recognized a compelling State interest in allowing water utilities to withdraw sufficient water to meet the needs of the citizens of the State. It is reasonable, then, to conclude that the Legislature determined that those water utilities have a reasonable right to withdraw water for the purpose of distributing it to the citizens in the supply area. However, according to Maine case law, legislative charters are not grants of exclusive water rights. In Kennebunk, Kennebunkport and Wells Water District v. Maine Turnpike Authority [145 Me. 35 (1950)], the Maine Supreme Court determined that charters allowing the use of brooks and streams are not grants of "proprietary rights" to use those waters; these charters only authorize that the stream or brook in question may be used as a source. In that case, the court said that in order to secure its rights to use the water from a brook or stream, the district or utility subject to the charter must first make a legal taking of the resource, in the manner prescribed by law, which guarantees just compensation to other riparians whose use of the water may be affected. Some suggest that the clarifications of water charter "rights" presented by the court in the Kennebunk case, are similar to what are known, today, as "franchise rights" for other types of utilities, where the utility is expressly authorized by the Legislature to build and operate its public works in an area (e.g., pipelines and transmission lines), but they are not granted the affected land or rights of way which may belong to others.

Charters for the use of great ponds or tidal rivers (water held in trust by State) have been viewed as granting more absolute use rights than other charters because in these cases the state has the ability to grant what is clearly within its trust, within the bounds of the public interest. However, while charters may be granted for reasonable public uses, the chartered uses are only reasonable relative to the uses of other riparians.

MAINE STATUTORY MODIFICATIONS TO THE COMMON LAW

Source of State Authority

State power to manage and control the use of water resources stems from three sources: the general police power (the power to regulate in the interest of public health, safety and welfare); the public's ownership of beds underlying navigable waters and lakes and great ponds; and the public's rights in navigation on all navigable waters. Yet according to Tarlock (1990), these State powers are limited by a number of constitutional constraints:

A) State powers in navigable waters are subordinate to paramount federal authority to preempt state allocation choices;

B) Interstate waters must be shared among littoral or riparian states and nations by the law of equitable apportionment which is enforced by the U.S. Supreme Court, which is the court of original jurisdiction for such cases;

C) State regulation subject to federal and state constitutional guarantees against the taking of property (including riparian rights) without due process of the law and against impairment of interstate commerce; and

D) The special history of navigable waters which has led to the recognition of "public trust" rights which may constrain inconsistent state allocations.

While much of Maine's water law consists of traditional common law concepts, the Legislature has acted with increasing frequency to supplement and, in some cases, to supplant those concepts. The Legislature has been particularly active in the area of environmental protection. As a result, current Maine statutory law recognizes both the public nature of water resources and the need for public protection. Below are some highlights of Maine Statutes affecting water and water use. Appendix B to this report provides the text and indexing of compiled Maine Laws relating to water.

General Provisions

Title 38 M.R.S.A. 361-A defines for purposes of statutes administered by the Department of Environmental Protection, "waters of the State" to include all surface and subsurface waters which are contained within, flow through, or under or border upon this State ... except such waters as are confined and retained completely upon the property of one person." This definition recognizes the public trust in the water and provides a basis for much of Maine's current, albeit fragmented, statutory water law.

Title 38 MRSA § 480 et. seq., Maine's Natural Resources Protection Act, clearly sets forth the overriding public policy concerns associated with Maine's rivers and streams, great ponds, freshwater wetlands and coastal wetlands. The Act specifically targets these resources for special protection and scrutiny. It prohibits, except by permit, certain dredging, filling, soil alteration, draining and construction activities affecting these resources. It also authorizes the establishment and maintenance of a state data bank containing information about these resources.

Rivers and Streams

A fairly well-developed statutory framework designed to protect Maine's rivers and streams currently exists in Maine. This framework recognizes the essentially public nature of these waters.

Title 38 MRSA § 543, Maine's Oil Discharge Prevention and Pollution Control Act, prohibits the unlicensed discharge of oil into or upon "any river [or] stream." This prohibition applies both to navigable and non-navigable rivers and streams.

Title 38 MRSA § 435, Maine's Mandatory Zoning and Subdivision Control Act, requires that land within 250 feet of the normal high water mark of any pond, river or salt water body be subjected to zoning and subdivision controls.

Title 12 MRSA § 401-406, Maine Rivers Act, establishes certain policy considerations that must be considered when deciding how Maine's rivers and streams are to be used. The statute notes that "with careful planning our foreseeable needs for all of these uses may be reasonably integrated harmoniously with one another on the state's 32,000 miles of rivers and streams."

Great Ponds

The Legislature has codified the common law definition of Great Ponds and added to that definition as follows:

> "Great ponds" means any inland bodies of water which in a natural state have a surface area in excess of 10 acres, and any inland bodies of water artificially formed or increased which has a surface area in excess of 30 acres. 38 MRSA § 480-B.5.

Several statutes affect Great Ponds. These legislative initiatives recognize the public interest in these ponds and seek to protect them for the enjoyment of future generations.

In addition to the special protection measures identified above, the Natural Resources Protection Act (Title 38 MRSA § 480-N) authorizes research and study into lakes, with special consideration given to restoration and enhancement; and, establishes a Lake Restoration and Protection Fund from which monies may be allotted to restore or protect a lake.

Title 38 MRSA § 435-447, Mandatory Zoning and Subdivision Control Act. As noted above with respect to rivers, this statute, recognizing the State's role as trustee of its waters, requires that any land within 250 feet of the normal high water mark of any pond, river or salt water body be subjected to zoning and subdivision controls.

Title 38 MRSA § 465-A. This statute classifies, with respect to quality, both Great Ponds and ponds of less than ten acres identically. The statute prohibits new direct discharge of pollutants into these waters.

Groundwater

Title 38 MRSA § 543 explicitly recognizes the public interest in the preservation of quality groundwater by rendering illegal the discharge of oil "into or upon any groundwater ... of the State." By definition, discharge of oil includes leakage of tanks and seepage of spills to the groundwater. This prohibition applies not only to "waters of the State, "but also to private water supplies. An occupier of land no longer has the right to pollute his "own" water. Section 543 simply recognizes the hydraulic facts: groundwater is a fragile resource that is not easily compartmentalized, and it is the rare case that a "private" well is not somehow interconnected with the groundwater of other users.

The so-called "English Rule" was further modified by the Legislature in 1979 by enactment of Maine's Groundwater Protection Program, 38 MRSA § 401-404. Section 401 explicitly recognizes the public nature of rights in groundwater:

> The Legislature finds and declares that the protection of groundwater resources is critical to promote the health, safety and general welfare of the people of the State.
>
> The Legislature further finds and declares that an adequate supply of safe drinking water is a matter of the highest priority and that it is the policy of the State to protect, conserve and maintain groundwater supplies in the State.
>
> Because of the importance of groundwater to the safety and well-being of the State, there is an urgent need for the coordination and development of the programs to assess the quality and quantity of and to protect groundwater.

Other groundwater-related statutes that evidence the State's concern for such water include, but are not limited to, the following:

> Title 38 MRSA § 481-490, Maine's Site Location of Development Act, requires developers of large construction projects to take into account the effect on groundwater such projects are likely to produce. If projects pose an unreasonable risk to groundwater, the Board of Environmental Protection may refuse to approve a development proposal.

Title 38 MRSA § 465-C, 470, Classification of Groundwater. These statutes classify groundwater with respect to quality. Section 465-C sets up two possible classifications: Class GW-A, the highest classification suitable for public water supplies, and GW-B, suitable for all usages other than public water supplies. Section 470 sets up, in effect, a presumption that groundwater shall be classified as Class GW-A. This classification scheme illustrates a legislative preference for maintaining the highest quality standards for groundwater.

Title 12 MRSA § 550-B, Water Wells Act, requires well contractors to report to the Maine Geological Survey, within 180 days of drilling a well, information relating to location, construction, and well yield. Information supplied by well contractors is then used by the Maine Geological Survey as an additional tool in the ongoing process of aquifer mapping.

The Legislature has also recognized that the common law is sometimes inefficient and not always equitable arbiter of private rights. For example, Title 38 MRSA § 404 provides for a statutory right to private action when a landowner's or occupier's domestic groundwater use is damaged by another non-domestic use, although no particular remedies are prescribed or suggested. The statute in effect modifies the common law by creating a priority for domestic groundwater use and recognizes the hydrologic interconnectedness of groundwater, which are not inherent under either the Absolute Use or American Rule doctrines.

Groundwater users are given further protection by Maine's Underground Oil Storage Facilities and Groundwater Protection Act, 38 MRSA § 561-570-G. Section 561 recognizes that the protection of the waters of the State, including groundwater, "is of the highest importance" and that of the State's waters are threatened by the existence of leaking underground oil storage tanks. The statute creates an administrative apparatus that, utilizing principles of strict liability, has the authority to award a person damages for injury to real estate, personal property or loss of income caused by a discharge of oil into that person's groundwater.

Finally, 22 MRSA § 2660-A, enacted in 1987, (Water Transport Law) prohibits the transportation of water, including groundwater for "commercial purposes" in containers larger than ten gallons beyond the boundaries of the municipality or town in which the water is naturally located or any bordering municipality or town. Section 2660-A(3) allows the Commissioner of Human Services to authorize the transportation of water for commercial purposes for three year periods if the Commissioner finds that:

1) transport of the water will not constitute a threat to public health, safety or welfare;

2) that the water is not available naturally in the location to which it will be transported; and

3) that failure to authorize transport of the water would create a substantial hardship to the potential recipient of the water.

Note: The topic of water diversion is discussed at length in Part Three of this report.

Municipalities

As noted above, municipalities have no greater or lesser legal ownership interests in water than any other landowner. Municipalities have been, however, delegated the authority to adopt regulations in order to ensure the maintenance of high quality public water supplies. Title 22 MRSA § 2642, for example, states that a municipality may "adopt regulations governing the surface uses of sources of public water supply, portions thereof or land overlying groundwater aquifers and their recharge areas used as sources of public water supply, located within that municipality in order to protect the quality of such sources of public water supply or the health, safety or welfare of persons dependent upon such supplies." Furthermore, under 22 MRSA § 2647 a municipality "is authorized to take "reasonable steps to protect a public water source from pollution." Among the "reasonable steps" a municipality, or its agent, is authorized to enter and inspect a facility suspected of polluting a public water supply and issue an order to stop any illegal discharges or practices.

Municipalities are also authorized to regulate materials, construction, alteration, and inspection of all pipes through which water is carried, pursuant to 30 MRSA § 3221. Section 3221 explicitly requires such regulation to comply with regulations promulgated by the Department of Human Services.

PART TWO

HOW MAINE'S CURRENT WATER LAW RELATES TO CONCERNS ABOUT WATER RESOURCE MANAGEMENT

In eastern states, the common law doctrine of water use and allocation has worked reasonably well, so long as water resources were abundant. The riparian doctrine has traditionally been associated with relatively free access to water resources for both consumptive and non-consumptive uses. By its nature, the common law can be adaptable to changes, but these changes generally lag far behind societal trends. Where the reasonable use doctrine is followed, the common law may allow new water uses in response to changing social and economic circumstances.

Reflecting a water-rich, sparsely populated state with a relatively small industrial base, Maine's water law is in many ways a vestige of the early English doctrines of riparian rights to surface waters and absolute ownership of groundwater. Maine's allocation of water rights in surface streams is based on an 1832 case [Blanchard v. Baker, 8 Me 253 (1832)] which in legal substance remains virtually intact with the exception of subsequent reasonable use clarifications. Kennebunk, Kennebunkport, and Wells Water District v. Maine Turnpike Authority, 145 Me. 35 (1950); and In re: Opinions of the Justices, 118 Me. 503 (1919). Maine's allocation of groundwater rights as articulated by Chase v. Silverstone, [62 Me 175 (1873)], has not been substantively altered by subsequent cases (Trafton, 1977).

The fact that the common law of water has changed little in Maine is not because Maine courts have resisted change for the past century. Rather, there has been little opportunity or need for change as evidenced by a lack of noteworthy water disputes in the past. For the most part, the traditional common law doctrines have continued to adequately govern use in water-rich areas of Maine where disputes are sparse and, when they have arisen, the principle management concerns have been limited to the protection of private rights to the water. A simple rule, as we clearly have under the current law, is appropriate when the costs of allocating a resource are high, supplies are abundant, and all competing uses are making a similar use of the resource (Tarlock, 1990).

Nevertheless, a case can be made for some modifications to the current water law in Maine, particularly in light of recent incidents of salt water intrusion in overdrawn coastal aquifers, significant disputes among surface water uses which have found their way into the legislative arena and increased use of the resource. While these are generally localized events and problems which may not have ramifications beyond local water sources, more of them can be expected as needs increase in the future. Importantly, these situations underscore an emerging need for protection of multiple interests and the public trust, as opposed to the usual water disputes of earlier times that involved allocation between a few similarly-situated individuals. Where water supplies become critical, even in isolated areas, the traditional common law doctrines may not provide an adequate context for essential management of water resources and may not be adequately responsive to rapidly emerging needs. Neither do recent statutes which focus on water quality protection and do not comprehensively address water management issues.

The common law doctrines which apply in Maine do not to provide a basis to allocate water for maximum benefit among all users or to minimize the adverse affects of shortages (Trafton, 1977). The riparian rights doctrine applicable to surface water and the absolute use doctrine applicable to groundwater do not allow quantification of existing water rights and uses. Further, as articulated in Bailey v. Rust,[15 Me. 440 (1839), these doctrines do not provide protection for any specific (and perhaps more beneficial) uses against other existing or proposed uses. Although legitimate police power controls can be established, it would be difficult under the current law to systematically allocate among users in areas where water resources become scarce or to administratively contain the number of reasonable uses below the carrying capacity of a water source. Further, as natural flows of water are increasingly diminished in quantity and quality, there is a growing recognition of the importance of instream uses. Since the common law doctrines do not provide for systematic and quantitative allocations among competing uses, they do not guarantee even minimal water in times of scarcity to meet requirements for the usual array of human consumptive, non-consumptive, wildlife and instream needs.

There is also a case for consolidation of Maine water law to treat water in a more coordinated fashion. In Maine, as in most eastern states, separate doctrines arose for flowing surface water, non-flowing surface water, underground streams, and underground percolating water. The common law doctrine simply does not recognize the hydrologic interrelationship between surface and groundwater. A landowner's legal rights in surface water and groundwater are substantially different even though the water is part of the same hydrological system and the impacts of its use, albeit from different media, can have impacts throughout the hydrologic system.

Treatment of surface and groundwater resources under incompatible legal doctrines, can stifle efforts to manage either type. (Trafton, 1977). For example, where the public, or anyone, has a riparian right to a surface water body which is dependent upon flows from a groundwater aquifer, that surface water right may be jeopardized by an overlying landowner's legitimate withdrawal of groundwater from the aquifer. Another problem with separate treatment of surface and groundwater is the issue of whether to legally treat a spring as groundwater or surface water - an issue which is not clear in Maine law today. Legal rights in the same type of resource (and, for that matter, the same spring) could be governed by different doctrines subject to the choice of the particular courts involved. If, on the other hand, the law is modified to treat groundwater and surface water rights similarly, the dilemma regarding rights to springs would disappear.

There may also be a need to modify the common law to provide better management and conservation of water resources where they become critical. Both the riparian doctrine relating to surface water and the absolute ownership doctrine of groundwater can encourage waste and deterioration of water supplies to the extent that they fail to limit collective withdrawals (or other activities that effectively diminish available supply) to below the sustained yield of the resource. When unrestricted individual rights exist in shared natural resources as they do under the common law, a "tragedy of the commons" can occur (Sherk, 1990).

The "tragedy" - in this case the depletion of water resources beyond natural sustainability - results from the fact that it would not be in the economic self-interest of any individual to conserve or to protect a shared resource because such actions would only make more of the resource available for use by others. The economic interest of the individual is best served by maximizing individual use before others acting in a similar manner have depleted the shared resource. When a critical mass of individuals all seek to maximize their use of a shared natural resource the "tragedy of the commons" is inevitable (Hardin, 1973 and Sherk, 1990). The fact that Maine has not yet experienced any major "tragedies of the commons" relating to water resources is more a function of the vast water supplies in most of Maine and of the relatively slow development, until recently, of water utilization technologies. To date we have experienced relatively few severe water shortages or cases of over-withdrawals and few squabbles among riparians and groundwater users.

On the whole, Maine has a vast water supply and we can reasonably expect this condition to continue generally. Yet, our water utilization technologies are improving and some Maine communities have experienced groundwater contamination (which although already managed through a regulatory system, affects the quantity of available and usable water); some have experienced salt water intrusion due to over-withdrawals of scant coastal aquifers; some have growing demand for domestic and industrial water supplies; and a growing number are the sites of withdrawals of large quantities from local sources for commercial distribution of drinking water products. The fairly recent water management dilemmas of more populated eastern states, which have experienced many of these changes much earlier, should serve as a forewarning of what may happen in some Maine communities. The resulting "tragedies" will ultimately have to be addressed by management systems to supplant or complement the common law tenets, and allow remedial measures to sustain or replace local supplies.

Finally, at this time, there is no comprehensive approach to water resources management in Maine. As discussed in Part One of this report, many Maine statutes have significantly modified the common law as it applies to various aspects of surface water and groundwater management. Some, such as the Water Transport Law, the Maine Rivers Act, the Natural Resources Protection Act and Maine's water quality laws have clarified the scope of reasonable water uses in response to real or perceived threats to water resources in general or to certain specific resources. Others, such as Maine's Groundwater Protection Program have modified the English Rule by explicitly recognizing public rights in water resources.

However, single purpose and piecemeal statutes concerning such things as dams, environmental protection and stream flow requirements are generally not devised to remedy all ailments of the common law doctrines. They generally do not consider the interrelationships of their targeted resources and programs with the full range of requirements for comprehensive water resource management. To date, statutory modifications have neither replaced nor supplemented the common law in a way that would provide a comprehensive state water management strategy. They may provide sufficient management or protection of selected resources, but they do not singly or collectively provide comprehensive management or protection of all water resources.

PART THREE

STATE RESPONSES TO WATER RESOURCE MANAGEMENT ISSUES

In response to intensified disputes and concerns regarding water resource management, many states have modified their former common law systems (Sherk, 1990). The most common and significant themes among these changes are:

- Attaining conjunctive management of surface and groundwater resources;
- Determining or defining Allowable/Reasonable Uses through legislation;
- Implementing State-wide Planning and Management Systems
- Activating State registration/permitting systems for consumptive uses.

Conjunctive Management of Surface and Groundwater

Since statehood in 1820, Maine has applied the riparian doctrine (with reasonable use parameters) to flowing surface waters, and the doctrine of absolute ownership to groundwater. However, our knowledge of surface and groundwater hydrology has become more sophisticated since these doctrines were developed. The hydrologic interrelationships between atmospheric water, surface water and groundwater are now well understood and these relationships are now considered so fundamental that a water management program ignoring them is counter-productive. Yet Maine has not developed water management policy which recognizes the interrelationships between groundwater and surface water.

A number of eastern states have instituted "conjunctive management" of surface and groundwater by applying the so-called "American Rule" to groundwater. In many ways it is similar to the reasonable use rule of surface waters (The American Rule of Groundwater is also called the "reasonable use rule") (Tarlock, 1990). Under this rule each overlying landowner is restricted to the reasonable use of subsurface waters considering the similar rights of others affected by the use. Applying the same standard to both surface and groundwater uses (with some modifications to address the above shortcomings) could greatly aid unification of Maine's water management system, especially where use of groundwater affects surface water flows and *vice versa*.

In Maine, where surface water law is based primarily on the common law riparian doctrine, this would not require substantive change of existing surface water law. Modification of groundwater law in Maine to apply the reasonable use parameters would unify the doctrines for surface water, subterranean streams and percolating groundwater (Trafton, 1977). If otherwise desired, this could even allow a single agency's conjunctive management and allocation of all water resources (Sherk, 1990). This would, in effect, abrogate the rule of capture of groundwater, but would still allow for all reasonable uses of groundwater which accounts for impacts upon both surface and groundwater resources.

Determining Allowable/Reasonable Use

As indicated in Part One, under the reasonable use rule, allocation of water is governed by a somewhat subjective "reasonableness" standard. Absent any statutory guidance by the legislature, determining reasonable use is wholly a litigious question which can be subjective and unpredictable. Therefore, if a state is to apply a reasonable use rule to surface water and/or groundwater uses, the legislature may wish to define reasonable uses for state water resources and to establish preferences and priorities in the event of water shortages, to address the degradation of the resource, or to serve as a set of principles for resolving disputes. (**Note:** additional discussion regarding reasonable use determination is included in the subcommittee report on dispute resolution).

Eighteen eastern states have defined or suggested reasonable uses of both surface and groundwater through legislation. They generally have used some combination of three approaches: enacting a general policy statement in a statute regarding the uses to which the waters of the state may be put; including a specific definition of allowable uses in a section of the statute; and listing in the statute a series of factors to be considered (or impacts avoided) for a water use to be allowable. These general approaches are instructive, but based on the examples drawn from some states it is clear that a very careful legislative drafting is required to develop an allowable use definition that is neither too broad (including every possible use of water) nor too narrow (excluding uses that may be of benefit to the state) (Sherk, 1990).

Florida and Indiana, for example, have adopted variations of the "reasonable-beneficial use" definition from the Model Water Code which basically state, "the use of water in such quantity as is necessary for economic and efficient utilization, for a purpose and in a manner which is both reasonable and consistent with the public interest" (Sherk, 1990). While this, arguably, is not a legally helpful definition of reasonable/beneficial uses (ie. it predicts nothing and may only serve to invite legal disputes), as a general policy statement it appears to be a step toward establishing meaningful parameters. It also requires consideration of the public interest unlike the settlements historically applied to disputes between individual riparians. With accompanying definitions and more detail about the factors to be considered, this general policy statement can be more precise.

Some states have taken actions to designate desired off-stream as well as off-stream uses as "reasonable", thus explicitly recognizing that diversions out of the water basin can be beneficial. Some states definitions of reasonable/beneficial uses have also included stream-flow conditions maintained to protect instream beneficial uses and public water supplies (Sherk, 1990). In fact, reasonable use definitions can allow for minimum protected flows in view of protecting the public interest for navigation, recreation, fishing hunting, etc. (Meyers and Tarlock, 1973). In some states where water use permits are required, minimum flows have been protected by limiting the definition of usable water resources to the quantities which exist above given stream flows or lake levels. In Massachusetts, for example, instream flow requirements are themselves considered "essential water uses" to be protected during drought conditions (Sherk, 1990).

State-wide Planning and Management

A state-wide system for comprehensive planning and management of water resources may be in the state's long-term best interests because it provides a comprehensive framework for the management and allocation of state water resources (Sherk, 1990). Although such a system, fully developed, may not be immediately necessary, the first step should be taken to create a state authority to develop state-wide water plans. These plans are often inventories of existing uses, projections of future demand and the identification of problem areas such as supply shortages or flood control. They provide the factual basis for subsequent hard management choices (Tarlock, 1990).

State Registration/Permitting of Surface and Groundwater Withdrawals

Nineteen eastern states have enacted permitting or registration requirements applicable to the use of some or all surface and groundwater. These temporal, non-priority permit systems are well adapted to state planning and water resources management activities (Meyers and Tarlock, 1973). Under such a system, the state's authority to grant or deny permits empowers the agency to favor productive (and not wasteful) development of water resources, based on goals and objectives that have been established as part of the overall water resources planning process. Under a registration system, a state may be limited to determining the number and quantity of existing uses, whereas a permitting system is a mechanism to both quantify existing water uses and verify the right of the water user to continue those uses (Sherk, 1990). All states with non-priority permits recognize an equity of right of all permits, regardless of when they were granted (Meyers and Tarlock, 1973).

The substitution of a permit system for the common law makes all water rights more secure. This rationale is often sufficient to sustain a permit system that changes the form of the right from the common law to an administrative permit system because the change promotes greater access to water sources and security from challenges to one's right to use the water (Tarlock, 1990).

Many public resource management objectives can be achieved through the administrative and decision making process of water use permitting. For example, the State of New York considers the following in its groundwater permit decisions: 1) the specific yield of the aquifer; 2) the anticipated amount of the withdrawal; 3) whether the aquifer is over or under-stressed; 4) the proposed use of the water and whether the water will return to the aquifer as fresh recharge or as waste; 5) the relationship between the amount of the withdrawal and the level of existing local and regional withdrawals; and 6) the degree of consistency between the requested rate of withdrawal and any regional water management plans (Tarlock, 1990).

The legislature may establish certain threshold use levels and provide exemptions from statutory requirements for water uses below the threshold levels. All of the eastern states with permitting or registration requirements have established exemptions for uses below a certain quantity. Eleven have used a minimum threshold of 100,000 gallons per day; three have adopted a minimum threshold of 50,000 gallons per day; four have adopted a

minimum of 10,000 gallons per day and one (Massachusetts) has adopted a minimum threshold of 1,000,000 gallons per day applicable to basin diversions (Sherk, 1990).

Sometimes these exemptions are defined by political compromises (sensible or otherwise) made among the affected interests. Other times they reflect a sensible decision that the costs of regulating small uses exceed the benefits - the benefits obtained by requiring smaller users to register their uses or obtain a use permit are offset by the burden such requirements impose on the water user and the administering agency. On the other hand, some believe that such exemptions can have significant cumulative impacts (Tarlock, 1990).

Regardless of threshold levels, experiences of some states suggest that water use permits should be limited to the amounts of water actually used. If not, there can be little overall control and management of the resource and usually less ability to monitor use due to less accurate reporting (Meyers and Tarlock, 1973). Also, other states' experiences suggest that permitting fees should be high enough to help defray administrative costs and to give users incentives to actually use all the water taken or assigned to them (Meyers and Tarlock, 1973).

Selecting the appropriate duration of water use permits also requires careful consideration. Permits of short duration may enhance state control over water, but they also discourage investment in water-related projects and facilities (Sherk, 1990). If at all possible (and sometimes it is not), the permit should last long enough to allow users time to recover their investments in water use projects (Meyers and Tarlock, 1973). Permittees may be further assured of continued use if there are assurances that permits may be renewed.

Pre-existing water uses and the "Takings" Issue

If a state chooses to convert its riparian system to a permit system, one of the most important threshold legal issues is the recognition of existing riparian water uses. State water resource allocation either eliminates or modifies common law rights and usually substitutes new administrative rights in their place (Tarlock, 1990). Since the right to use both surface and groundwater is a property right, although subject to regulation by the states, changes affecting those rights must meet due process requirements. Adequate notice of any change in state water law, such as registration or permit requirements, must be given (Sherk, 1990). Water management legislation generally meets the constitutional requirement that there be a rational relationship between the purpose of the regulation and the means. The hard issue is whether the exercise of the police power deprives an individual riparian of a substantial portion of the value of his property or substantially eliminates a valuable use of the water (Tarlock, 1990).

Some states converting to a permit system have required existing water users to obtain a permit within a certain time period. After that time, all subsequent users must obtain a permit (Sherk, 1990). Other states have provided similar mechanisms to assure that existing uses can be integrated into the new system. Generally, states have protected investment-backed expectations by preserving pre-existing water rights to the extent they were put in actual use, but have regulated proposals based on future possibilities and

speculation regarding future, undefined uses and quantities of water (Tarlock, 1990). As long as current uses are initially permitted, the takings issue may not be relevant.

Diversions from Water Basins

As local water resources become scarce in some regions of Maine and the northeastern U.S., efforts to tap Maine's more abundant water resources will likely increase. Diversions from Maine watersheds (drainage basins) occur today and may increase in the future.

The term "water diversion" may bring to mind pictures of man-made channels transferring millions of gallons each day from pristine uplands to distant metropolitan or agricultural centers. Such diversions may be feared because they may diminish water supplies to the point where local needs cannot be met. However, water diversions can also occur as inconspicuous and commonplace deliveries, insignificant to sustainability of the local resource and causing little harm to local domestic uses. The severity of impacts by a diversion depends upon the amount of water diverted, the sustainable yield of the resource and the quantity of water withdrawn by other users.

In-state diversions in Maine may include:

- Withdrawals of drinking water for bottling and/or sale outside of the withdrawal basin;
- Withdrawals of water for irrigation or industrial use either outside the basin, or where the water is discharged outside the basin;
- Diversion of some waterways for hydropower or other non-consumptive use that result in discharge to another basin; or
- Piping water from watersheds to supply communities which lack sufficient local supplies.

Interstate diversions from Maine may include:

- Trucking or piping water to bottling or industrial users out of state;
- Export of water bottled in Maine.
- Piping or trucking to supplement an out-of-state public water supply; or
- Consumptive water use or diversion in state-border communities.

With increased concern about potential impacts and shortages from water transfers, as many as fifteen states have imposed area of use requirements, export restrictions or diversion restrictions. Either these uses are specifically prohibited, or express state approval is required. Some states even require an environmental impact statement that addresses the impacts of the proposed diversion on existing and future water uses; one state (Florida) allows out-of-basin diversions if consistent with the public interest and if there is no local government opposition (Sherk, 1990).

Maine, too, has sought to better understand and control water diversions and transport activities and has enacted statutes to control some diversion activities. Maine's

current water transport law (22 MRSA § 2660-A), enacted in 1987, prohibits (without express authorization) transportation of water, including groundwater, for "commercial purposes" in containers larger than ten gallons, beyond the boundaries of the municipality in which the water is naturally located. This law allows for authorization by the Commissioner of Human Services for commercial transport over a three-year period if the Commissioner determines: that the transport will not threaten public health, safety or welfare; that the water is not available naturally in the location to which it is being transported; and that failure to authorize the transport would result in a hardship to the potential recipients.

Critics of this law contend that the statute is not only unwise from a policy perspective, but also violates the Commerce Clause of the United States Constitution. These critics argue that Maine citizens should be free to transport water in Maine and elsewhere because the water resource is important to Maine's economy. Further, because the Unites States Supreme Court has held that water is an article of interstate commerce, interstate commercial activity in that resource cannot be unreasonably interfered with. However, the water transport law makes no distinction with respect to interstate commerce in that it facially treats interstate and in-state transports equally.

State laws that directly limit or reduce interstate water transport may be difficult to uphold in court because they run counter to the Commerce Clause. To be upheld, a state's interstate controls must be within the federal parameters of reasonableness. The "impermissible burden test" for reasonableness was established by the U.S. Supreme Court in Sporhase v. Nebraska [458 U.S. 941 (1982)], a case which dealt with the transfer of groundwater across the state line from Nebraska to Colorado. It is clear that a state may not totally prohibit the export or diversion of water to another state. What is unclear is the type of state-imposed restriction that will conform to constitutional requirements (Sherk, 1990).

In Sporhase, the Supreme Court established four essential criteria for testing the constitutionality of state statutes that restrict interstate transfers of groundwater:

1. The statute must have a legitimate social purpose;

2. The statute must regulate interstate and intrastate (within the state) diversions even-handedly;

3. The local (State) benefits of the statute must outweigh any incidental harm to interstate commerce; and

4. Assuming the existence of a legitimate local purpose, that purpose cannot be better achieved by alternative means less detrimental to interstate commerce.

No one has yet challenged Maine's Water Transport Law in court. Therefore, no court opinion about its constitutionality has ever been made, although the constitutionality of the transport law is less than clear.

The Sporhase decision is, nevertheless, very instructive to states contemplating laws which will affect interstate transfers of water. Importantly, Sporhase tells us that states can impose limitations upon interstate water transfers, providing that the state can demonstrate to the court's satisfaction that these controls meet the standards of reasonableness. Any state regulatory approach to water resource management should be designed to meet the Sporhase criteria, if for no other reason than to survive any constitutional challenges. Even-handed regulation which recognizes all legitimate uses of water, and which is carefully drawn to achieve a demonstrated conservation and protection purpose, is likely to survive constitutional scrutiny under the commerce clause and is also likely to best serve the collective interests of the people of the state.

TOPICAL INDEX

American Rule 7, 10, 15, 20
Appropriation Doctrine 2
Artificial watercourses 6
Charters 11
Classification of groundwater 15
Commerce Clause 25, 26
Common law of groundwater 10
Common law of surface water 2
Conjunctive management 20
Conservation 18, 26
Department of Environmental Protection 12
Department of Human Services 11, 16
Diversions 4, 11, 21, 23-25
English Rule 4, 7, 10, 14, 19
Federal authority 12
Great ponds 5, 11-14
Interstate waters 12
Maine Rivers Act 13, 19
Maine's Groundwater Protection Program 14, 19
Mandatory Zoning and Subdivision Control Act 13, 14
Municipalities 11, 16
Natural flow theory 4, 7, 8
Natural Resources Protection Act 13, 19
Navigable waters 5, 6, 12
Non-tidal streams and rivers 5
Oil Discharge Prevention and Pollution Control Act 13
Permitting 20, 22, 23
Piers and wharfs 5
Pollution 9, 10, 13, 16, 29
Prescriptive rights 4
Public water suppliers . . . . . ii, 11
Reasonable use 3-5, 7-10, 17, 20, 21
Registration 20, 22, 23
Riparian Doctrine 2, 4, 17, 18, 20
Riparian rights 2-4, 6-8, 10, 12, 17, 18
Rivers and streams 5, 13
Rule of capture 10, 20
Site Location of Development Act 14
Springs 6, 18
State-wide planning and management 20, 22
Subsurface streams 6, 7
Takings Issue 6, 24
Tidal Rivers 5, 11
Tragedy of the commons 18, 19, 29

TOPICAL INDEX Continued

Transportation of water 15, 25
Water Transport Law 15, 19, 25, 26
Water utilities 11
Water Wells Act 15
Waters of the state 12, 14, 15, 21

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