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Survey of Oregon's Water Laws

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I. CLASSIFICATION OF WATERS AS AFFECTING TITLE TO WATER LANDS

A. Navigability

Determination of title to water lands involves the question of the navigability of the body of water to which such lands are related. All land in Oregon, including that comprising the beds of its lakes and streams, was originally owned by the United States, by virtue of its ownership of the territory.[1] Upon the creation and admission of the state to the Union the title to the beds of navigable waters within the state passed to the state as one of the incidents of sovereignty,[2] while title to the beds of non-navigable waters remained in the United States (or its grantees) as riparian owner.[3] For the purpose of determining whether title to the bed of a particular body of water passed to the state, navigability is a federal question,[4] and the test is apparently distinct from that employed to determine the reach of the commerce power of the United States.

For purposes of the Commerce Clause, the early case of The Daniel Ball[5] articulated the basic test which is still the starting point for determinations of navigability:

> Those rivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.[6]

However, while acknowledging the Daniel Ball test to be correct, the Supreme Court in United States v. Appalachian Power Co.,[7] a commerce power case, held that:

> . . . a waterway otherwise suitable for navigation, is not barred from that classification merely because artificial aids must make the highway suitable for use before commercial navigation may be undertaken.[8]

It is doubtful whether this elaboration on the navigability test will be carried over into title and boundary cases.

A leading case on navigability for boundary purposes is United States v. Holt State Bank.[9] This case was a suit by the United States to quiet title to a lake bed. The Supreme Court applied the Daniel Ball test to lakes as well as rivers, and qualified that rule with the following, formulated in The Montello:[10]

> . . .and further. . . navigability does not depend on the particular mode in which such use is or may be had -- whether by steamboats, sailing vessels or flatboats -- nor on an absence of occasional difficulties in navigation, but on the fact, if it be a fact, that the stream in its natural and ordinary condition affords a channel for useful commerce.[11]

This test was applied in United States v. Utah[12] and United States v. Oregon,[13] both of which were quiet title actions decided prior to the Appalachian Power case. In a recent quiet title suit the Court of Appeals for the Tenth Circuit cited all of these cases, including Appalachian Power, but stated as the general rule that to be navigable in fact and in law, "a river in its natural and ordinary condition must be used or be susceptible of use as a channel for commerce. . ."[14]

It is reasonable to expect that different tests will be explicitly applied to the two types of cases in the future. They are already separated in time. To determine ownership of the bed, the test is of navigability at the time of the formation of the Union or admission to statehood, while a waterway which has become navigable since that time will be subject to federal regulation of commerce.[15]

Treating the two situations differently will avoid a possible conflict between the general tendency to expand the commerce power, and the basic policy in favor of uniformity and stability in property law. Since "when once found to be navigable, a waterway remains so,"[16] it is unlikely that the reach of the commerce power will be circumscribed by a prior determination that a waterway was not navigable when the state where it is located entered the Union.[17]

Although the test of navigability for purposes of determining title is a federal question only as it concerns the question of which beds passed to the state upon its admission to the Union, Oregon appears to have adopted the federal test as a standard for the state's conveyances as well.[18] In only one situation has the state set its own standard of navigability for title purposes. Statutes were enacted declaring that all meandered lakes within the State are navigable public waters of the State and that title to the beds was in the state.[19] An attempt to assert this ownership against the federal government as to lakes which were non-navigable according to the federal test failed. In United States v. Oregon[20] the United States Supreme Court held that these statutes could not divest the United States of its title to the beds, nor could they control federal grants to private parties. Although the federal patents involved in the case were all issued prior to the enactment of these statutes, the Court indicated that later patents as well could convey the lake beds to private parties along with the uplands, since the United States owned the beds. The statutes, the court said, could not control the construction of the patents; rather, the intent of the United States as grantor would control.[21]

Apparently the state has never attempted to assert its own test of navigability where it was entitled to do so. Probably it could declare non-navigable, and thus in private ownership, waters which are navigable by the federal test. Disputes arising under such a standard would be purely a question of the state's disposition of its own lands, and should not be reviewable by the Supreme Court of the United States.

Another meaning of "navigability" is sometimes found in the Oregon cases. Oregon has adopted a fourfold classification of the state's inland waters:

> (1) Those in which the tide ebbs and flows, which are technically denominated navigable, in which class of the sovereign is the owner of the soil constituting the bed of the stream, and all right to it belongs exclusively to the public. (2) Those which are navigable in fact for boats, vessels, or lighters. In these the public has an easement for the purposes of navigation and commerce, they being deemed public highways for such purposes, although the title to the soil constituting their bed remains in the adjacent owner, subject to the superior right of the public to use the water for the purposes of transportation and trade. (4) To this list may be added our larger rivers susceptible of a great volume of commerce where the title to the bed of the stream remains in the state for the benefit of the public.[22]

In some cases the issue has been whether the body of water in question was navigable so as to give the public an easement for a particular use even though title to the bed was in the riparian owners.[23] The court spoke to the difference in Luscher v. Reynolds[24] where, using the above classification, it said:

> While we have held that Blue Lake is not a navigable body of water in the sense that title to the bed thereof would pass to the state upon admission to the Union, it is navigable in a qualified sense.
>
> . . .
>
> We think Blue Lake comes within the above second classification where title to the bed is in the adjacent owners, subject however to the superior right of the public to use the water for the purposes of commerce and transportation.[25]

In this case the lake was too small to be of any use in commercial navigation, but was suitable for recreational use. The court was concerned that public enjoyment of such bodies of water not be foreclosed by a finding of private ownership of the bed, and said that where navigability in this qualified sense is involved, "A boat used for the transportation of pleasure-seeking passengers is, in a legal sense, as much engaged in commerce as is a vessel transporting a shipment of lumber."[26]

B. Tidal and Non-tidal Waters

Inquiry must sometimes be made as to whether inland waters are affected by the tides. No cases have been found where the determination of this question has been troublesome, and it seems to be of little importance at present. Oregon recognizes the "technical" navigability of all tide waters,[27] which

apparently derives from the court's notion of the common law of England, where navigable waters were defined as those subject to tidal action, and title to the beds of which was prima facie in the Crown.[28]

The question of tidal action has in the past been determinative of the effect of statutes dealing with disposal of the state's "tidelands."[29] However, the recent cases seem to assume that such legislation also covers land between high and low water marks on non-tidal navigable streams.[30]

1. Shirely v. Bowlby, 152 U.S. 1, 51, 14 S.Ct. 548, 38 L.Ed. 331 (1894).

2. United States v. Oregon, 295 U.S. 1, 14, 55 S.Ct. 610, 79 L.Ed. 1267 (1935). State ownership is subject to the federal commerce power. Id. Transfer of ownership is also justified as being necessary to insure the new state's equality with the original thirteen states. United States v. Utah, 283 U.S. 64, 75, 51 S.Ct. 291, 85 L.Ed. 243 (1940). The Oregon Admission Act, 11 Stat. 383 (1859) provides: "Be it enacted: . . . That Oregon be, and she is hereby received into the Union on an equal footing with the other states in all respects whatever. . ."

3. United States v. Utah, 283 U.S. 64, 51 S.Ct. 438, 75 L.Ed. 844 (1940); Luscher v. Reynolds, 153 Or. 625, 631, 56 P.2d 1158 (1936).

4. United States v. Oregon, 295 U.S. 1, 55 S.Ct. 610, 79 L.Ed. 1267 (1935).

5. 77 U.S. (10 Wall.) 557 (1870).

6. Id. at 563.

7. 311 U.S. 377, 61 S.Ct. 291, 85 L.Ed. 243 (1940).

8. The court said that the requirement of natural and ordinary condition referred only to the "volume of water, the gradients and the regularity of the flow." Id. at 407.

9. 270 U.S. 49, 48 S.Ct. 197, 70 L.Ed. 465 (1926).

10. 87 U.S. (20 Wall.) 430 (1874).

11. United States v. Holt State Bank, 270 U.S. 49, 56, 48 S.Ct. 291, 85 L.Ed. 243 (1940).

12. 283 U.S. 64, 76, 51 S.Ct. 438, 75 L.Ed. 844 (1931).

13. 295 U.S. 1, 15, 55 S.Ct. 610, 79 L.Ed. 1267 (1935).

14. Utah v. United States, 304 F.2d 23 (10th Cir. 1962).

15. United States v. Appalachian Power Co., 311 U.S. 377, 408, 61 S.Ct. 291, 85 L.Ed. 243 (1949).

16. Id.

17. Although in Oklahoma v. Texas 258 U.S. 574, 591, 42 S.Ct. 406 (1922) a boundary case the Court had held that "no part of the (Red) river within Oklahoma is navigable," that portion of the river was held in Oklahoma v. Atkinson Co., 313 U.S. 508 (1940) to be subject to the control of Congress in the exercise of its commerce power relating to the navigable portions.

18. Shaw v. Oswego Iron Co., 10 Or. 371 (1882); see Comment, 28 Or. L. Rev. 267, 271-72, 274 (1949).

19. O.L. 1917 c. 278, 1921 c. 280, 1923 c. 282, now ORS 274.025 to 274.520 (1967). The 1967 legislature undertook a complete revision of the public land laws. O.L. 1967 c. 421. These provisions were included in the

20. 295 U.S. 1, 55 S.Ct. 610, 79 L.Ed. 1267 (1935). See also United States v. Otley, 127 F.2d 988 (9th Cir. 1942) involving title to the beds acquired by a United States patent.

21. 295 U.S. 1, 55 S.Ct. 610, 79 L.Ed. 1267 (1935).

22. Guilliams v. Beaver Lake Club, 90 Or. 13, 19, 175 P. 437 (1918).

23. Id. at 28: the stream possessed a "qualified navigability;" Luscher v. Reynolds, 153 Or. 625, 56 P.2d 1158 (1936); Shaw v. Oswego Iron Co., 10 Or. 371, 381 (1881); "Such streams, having at best but a limited capacity for (log) floatage occurring at regular seasons of high water, and at which times may be useful to trade and the interests of the community, can be used as highways by the public for that purpose, leaving in the riparian owners all rights of property not inconsistent with such use of the public." Weise v. Smith, 3 Or. 445 (1869), holding that the laws of navigation are applicable, so far as they are appropriate, to a stream which the public has the right to use as a public highway for floating logs.

24. 153 Or. 625, 56 P.2d 1158 (1936).

25. Id. at 634, 635.

26. Id. at 635.

27. See note 22, supra, and accompanying text.

28. Guilliams v. Beaver Lake Club, 90 Or. 13, 18-19, 175 P. 437 (1918); see Houck, A Treatise on the Law of Navigable Rivers (1868), Chapter 10, esp. pp. 15-25, for a discussion questioning the accuracy of this view.

29. Andrews v. Knot, 12 Or. 501, 8 P. 763 (1885); Johnson v. Knot, 130 Or. 308 (1886).

30. Lange v. St. Johns Lumber Co., 115 Or. 337, 237 P. 696 (1925); State v. Imlah, 135 Or. 66, 294 P. 1046 (1931); Freytag v. Vichas, 213 Or. 462, 326 P.2d 110 (1958).

II OWNERSHIP AND RIGHTS IN WATERLANDS

A. Beds of bodies of water (lands below low water mark)

Upon its admission to the Union, the state acquired title to all lands under navigable waters, subject to the federal navigation and commerce powers.[1] As will be seen, this title is also held subject to the rights of the people of the state to the use of the waters -- that is, the state's title is not merely proprietary, but also includes the jus publicum, which is sometimes described as a trust for the people of the state.[2]

State powers and benefits resulting from ownership

Power to sell title

It is generally held that the land under navigable waters in the territories was held in trust by the United States for the states ultimately to be created, leaving it to the latter to determine the rights of riparians to soil below the high water mark.[3] Thus Oregon was entitled to determine its own policy as to sale of beds of navigable waters. However, it holds these beds subject to the rights of the public in the use of the waters.[4] The public right has been protected from inadvertant loss by the Oregon court, which has held that title to lands below low water mark of a navigable stream may not be acquired from the state by adverse possession.[5] An action by the state to establish its title to the bed of a navigable river is not subject to a defense of laches because such an action is brought not in the state's proprietary capacity alone, but is brought to enforce a public right or to protect a public interest.[6]

The power of the state to sell the beds of navigable waters under proper conditions has been assumed by the Oregon Supreme Court since at least 1910, when it said in dicta:

> Oregon, on its admission to the Union, . . . became the owner of all that part of the Columbia River, a navigable stream, lying south of the north boundary of the State. . . . Subject to the paramount right of navigation, Oregon, when it was thereafter empowered by enactment could, by its constituted agents, convey any of the islands in that river or any land forming a part of its bed.[7]

The Attorney General, however, felt that such lands could not be alienated.

> The State of Oregon, upon admission into the Union, became the owner of the beds of all navigable rivers and holds the same in trust, in its sovereign capacity, for the use and benefit of its people. The terms of this trust are such that the state cannot sell or otherwise dispose of or alienate the soil underlying its nontidal navigable waters.[8]

The cases cited in the opinion in support of this statement[9] do not require such a broad prohibition. Rather, they hold that the state cannot dispose of the beds of its navigable waters in such a way as to impair the public rights of navigation in the waters. By statutes enacted in 1967, the legislature has asserted the right of the state to sell the beds of navigable waters.[10] The statutes do not set out the conditions or reservations necessary to protect the public rights.

Power to authorize removal of material from the bed

The Division of State Lands[11] is authorized by statute to grant a lease entitling the lessee to remove materials from the bed of a navigable river upon payment of a royalty.[12]

In Salem Sand and Gravel v. Olcott it was held that the determination to grant such leases was entirely discretionary and mandamus would not lie to compel such action even though there were no conflicting applications.[13] The key to this holding was the word "may" appearing in ORS 274.530 (see footnote 12).

Much controversy has arisen over the meaning of ORS 274.550 and 274.570 with respect to the use of materials of the riverbed. ORS 274.550 authorizes the removal of materials without lease for certain enumerated purposes. ORS 274.570 declares unauthorized removal of such materials for commercial use a trespass. (See footnote 12). Litigation arose because it was not clear whether or not the enumerated activities on the one hand and "commercial use" on the other were intended to cover the entire range of possible uses. That is, were the two categories intended to be both mutually exclusive and exhaustive?

Thus, when the Port of Portland entered into a contract with a gas company to furnish the latter dredgings from the Willamette River adjacent to the latter's property, the State Land Board sued the Port to collect a royalty on the material removed. The Court reasoned that since the material was used for filling and diking of adjacent lowland, it was not a "commercial use." Therefore, no trespass had occurred and the State had no standing to sue.[14] In reaching its conclusion the court emphasized an earlier opinion of the then prosecuting attorney general to the effect that "commercial use" means the use of the materials "as commodities in trade and commerce."[15]

With such precedent to go on, the Port of Portland again decided to use the materials of the river -- this time for airport improvement and for use on industrial sites. The State Land Board again sued to collect royalties. This time the Land Board won. The Court held that ORS Chapter 274 (See footnote 12, especially ORS 274.550(b) and 274.570), required that a royalty be paid if the material was used over one-half mile from the riverbed regardless of whether or not the use was commercial.[16] Justice O'Connell concurred in the result reached by the majority but felt State v. Port of Portland, supra, should be overruled.[17]

1. United States v. Oregon, 295 U.S. 1, 14, 55 Sup.Ct. 610, 79 L.Ed. 1267 (1935).

2. Cook v. Dabney, 70 Or. 529, 532, 139 P. 721 (1914).

3. Shively v. Bowlby, 152 U.S. 1, 14 Sup. Ct. 548, 38 L.Ed. 331 (1894). Montana Power Co. v. Rochester, 127 F.2d 189, 191 (1942). Also, see Comment, 28 Or. L. Rev. 385 (1949).

4. Cook v. Dubney, 70 Or. 529, 139 P. 721 (1914). In this case, the state conveyed land which the buyer had described in his application as tideland. The court found that in fact it was part of the bed of the river, lying within the "official route of navigation as established by the general government." It was held that the deed conveyed nothing, because such a sale without proper protection for the public rights in the water would violate the trust under which the state's title was held. Id. at 532.

5. Gatt v. Hurlburt, 131 Or. 554, 284 P. 172 (1930).

6. Corvallis Sand & Gravel Co. v. State Land Board, 250 Or. 319, 439 P.2d 575 (1968). Justice O'Connell dissented from this holding, expressing his dissatisfaction with the "public v. proprietary function" test and asserting that the state in dealing with public lands should be treated as a private person.

7. Taylor Sands Fishing Co. v. State Land Board, 56 Or. 157, 159, 108 P. 126 (1910). See also Lewis v. City of Portland, 25 Or. 133, 168, 35 P. 256 (1893).

8. 31 Ops Att'y Gen. 104, 105 (1962-64).

9. Gatt v. Hurlburt, 131 Or. 554, 284 P. 172 (1929); Pacific Elevator Co. v. Portland, 65 Or. 349, 133 P. 72 (1913); Cook v. Dabney, 70 Or. 529, 139 P. 721 (1914); Illinois Central Railroad Co. v. The People of the State of Illinois, 146 U.S. 387, 36 L.Ed. 1018 (1889).

10. ORS 274.915 (1967). Except as provided in ORS 274.930 [Right of nonpublic riparian owner to lease or purchase new lands], the division may sell, lease or trade submersible or submerged lands owned by the state and new lands created upon submersible or submerged lands owned by the state and new lands created upon submersible or submerged lands owned by the State of Oregon in the same manner as provided for tide and overflow lands in ORS Chapters 273 and 274.

    ORS 274.005(5) (1967). "Submerged lands," except as provided in ORS 274.705 [as to tidal submerged lands], means lands lying below the line of ordinary low water of all navigable waters within the boundaries of this state as heretofore or hereafter established, whether such waters are tidal or non-tidal.

11. Successor agency to certain powers of the State Land Board. ORS 273.041 (1967).

12. ORS 274.530. Lease of stream beds for removal of material. (1) The State Land Board may, after notice of competitive bidding, . . . lease the beds

of navigable portions of navigable streams for the purpose of removing gravel, rock, sand and silt therefrom. . . . on a basis of the price per cubic yard for the material removed.

ORS 274.540. Application for lease. * * *

ORS 274.550. Removal of material without lease authorized for certain purposes. (1) The removal of gravel, rock, sand, silt or other material from the bed of bars of any navigable stream within the state is authorized when the same (a) is removed for channel or harbor improvement or flood control, or (b) is used for filling, diking or reclaiming land located not more than one-half mile from the bank of the stream, or (c) is used for filing, diking or reclaiming land owned by the state or any political subdivision as defined in subsection (1) of ORS 271.300 and located not more than two miles from the bank of the stream; however, prior to such removal, such person, organization or agency contemplating such removal shall first notify the State Land Board, and the board shall in turn notify the state agencies mentioned in ORS 274.530.

(2) No payment of royalty shall be required for such gravel, rock, sand, silt or other material unless the same is removed from the place deposited and sold or used as an article of commerce. . . .

(3) In addition to the purposes enumerated in subsection (1) of this section, any person may take such gravel, rock, sand, silt or other material for his own exclusive use to the extent of not more than 50 cubic yards in any one year; however, prior to such taking, the person contemplating such taking shall first notify the State Land Board. . . . [This provision was recently declared to be exclusively for the benefit of the people of Oregon. Therefore material could not be extracted without charge from the Oregon bed of the Columbia River for such use on the Washington bank. The decision was based on the theory that the State held the bed in trust for its people. State Land Board v. Western Pacific Dredging Corp. 244 Or. 184, 416 P.2d 667 (1966).

ORS 274.560. Lease terms; bond; option to lease or purchase forbidden; monthly reports and payments. * * *

ORS 274.570. Unauthorized removal as trespass. The establishment or placing of a dredging or digging outfit on any waters or stream, the bed of which belongs to the State of Oregon, and the removal of material from the bed thereof for commercial uses, without having applied for and received a lease, hereby is declared to constitute a continuing trespass.

ORS 274.580. Removal without compliance with statute prohibited. No person shall remove gravel, rock, sand or silt from the bed of any navigable stream of water, or from the bars of any navigable stream, or from any property of the State of Oregon, for commercial uses without complying with the provisions of ORS 274.540 to 274.560.

(Similar provisions, but with more exacting requirements are set out for the extraction of hard minerals. See ORS 274.615 to 274.650.)

13. Salem Sand and Gravel v. Olcott, 97 Or. 253, 191 P. 776 (1920).

14. State v. Port of Portland, 168 Or. 120, 121 P.2d 478 (1942). It should be

noted that the statutory language which the court was construing was the predecessor of the present law as it appeared in 1940. However, given the manner in which the Court construed that language, it had much the same meaning as appears today.

15. Ops. Att'y. Gen. Or., 1934-36, 796, 797.

16. State Land Board v. Port of Portland, 232 Or. 607, 376 P.2d 661 (1962).

17. Ibid., p. 611.

B. Private ownership of beds of non-navigable waters

Title to the beds of non-navigable waters within the state remained in the federal government as proprietor of the public domain. These lands are subject to patent, and federal patents of adjoining upland which bounds on the water are generally construed as carrying title to the center of the river or lake.[1] A similar rule of construction governs conveyances between private parties. When land adjacent to a non-navigable body of water is conveyed, title to the bed will ordinarily accompany that of the upland unless the conveyance indicates some intention to retain part or all of the water lands.[2]

Private ownership of the beds of these waters may be subject to a right of use in the public. If the water is found to be "navigable" for a particular purpose, the public has a right to use it for that purpose, and the riparian owner can not interfere with such use. Such uses have included: (1) pleasure boating;[3] (2) log floatage,[4] with the attendant right to place a log boom on the riparian owner's land where this was necessary to the floatage[5] and (3) maintenance of a houseboat;[6] there is, however, no accompanying public right to the use of the riparian owner's land for access or landing.[7]

There is an apparent discrepancy in theory between the case holding that the right of log floatage includes the right to place a boom on private land if necessary to the floatage, and cases holding that those using a stream have no right to the use of adjoining land. The latter represent the general rule,[8] and in one case the court reasoned that if the stream could not be successfully navigated without the use of the adjoining land then the stream itself is not "navigable" and the public has no easement.[9] The single case holding that there may be a right to place a log boom on adjoining land may, however, be distinguishab on its facts. There the capacity of the waterway (the Tualitin River) to float logs was not in question. Rather, the boom was necessary at the confluence of the river with the Willamette to prevent the logs from being swept over a falls

in the Willamette. The court's reasoning, however, was that if the boom were necessary and the river otherwise navigable for log floatage, denying the right to place the boom on the adjoining land would deprive the public of the use of a "navigable" stream, but that such use of the adjoining land must be limited to that which was absolutely necessary.[10]

1. United States v. Oregon, 295 U.S. 1, 27, 55 S.Ct. 610, 79 L.Ed. 1267 (1935).

2. Kingsley v. Jacobs, 174 Or. 514, 149 P.2d 950 (1944).

3. Guilliams v. Beaver Lake Club, 90 Or. 13, 175 P. 437 (1918); Luscher v. Reynolds, 153 Or. 625, 56 P.2d 1158 (1936).

4. Shaw v. Oswego Iron Co., 10 Or. 371, 45 Am. Rep. 146 (1882); Felger v. Robinson, 3 Or. 455 (1869); Weise v. Smith, 3 Or. 445, 8 Am. Rep. 621 (1869).

5. Weise v. Smith, 3 Or. 445, 8 Am. Rep. 621 (1869).

6. Salene v. Isherwood, 55 Or. 263, 106 P. 18 (1910).

7. Guilliams v. Beaver Lake Club, 90 Or. 13, 175 P. 437 (1918); Lebanon Lumber Co. v. Leonard, 68 Or. 147, 136 P. 891 (1913).

8. Am. Jur. Waters, sec. 213.

9. Lebanon Lumber Co. v. Leonard, 68 Or. 147, 151, 136 P. 891 (1913).

10. Weise v. Smith, 3 Or. 445, 450, 8 Am. Rep. 621 (1869).

C. Tidelands and other "submersible lands"

Title to land lying between high and low water mark of all navigable waters within the state passed to the state upon admission to the Union, as part of the beds of such waters.[1] One qualification to this general statement -- that the state acquired title only to that land not conveyed by the United States prior to the state's admission to the Union - is made by the federal courts[2] but not mentioned in discussions of the topic by the Oregon Supreme Court. The general policy of construing federal patents to lands abutting navigable waters as conveying only to the high water mark[3] seems to have made this qualification academic. No reported case discloses any federal grant of such lands in Oregon.

The state, which owns these lands by virtue of its sovereignty,[4] has power to dispose of tidelands[5] and other submersible lands,[6] subject to the paramount rights of navigation and commerce.[7] The interest of the state is often spoken of as consisting of two elements - the jus privatum and the jus publicum. The former is in the nature of a proprietary interest, and it is this element which is acquired by the state's grantee when such lands are conveyed. The latter element, however, is governmental in nature and cannot be alienated. The jus publicum is "the dominion of government or sovereignty in the State, by which it prevents any use of lands bordering on the navigable waters within the State which will materially interfere with navigation and commerce thereon."[7a] Oregon has long provided by statute for sale of tide and overflow lands[8] and has made legislative disposition of submersible lands on nontidal navigable waters.[9]

Present statutes regulating sales and leases by the state. Tide and overflow lands may be sold or leased to the highest bidder after newspaper advertisement, subject to a minimum price of $5 per acre in the case of sales, and subject to the right of the abutting upland owner to lease or purchase at the highest price offered in good faith in such bidding.[10] The riparian owner must receive actual

notice of the proposed lease or sale so that he may have the opportunity to exercise his preference right. The newspaper advertisement for bids will not suffice for this purpose.[11] This general authority to dispose of tidelands does not extend to those tidelands which are on the Pacific Ocean. As to them, ORS 390.720 (1967) provides:

> Ownership of the shore of the Pacific Ocean between ordinary high tide and extreme low tide, and from the Oregon and Washington state line on the north to the Oregon and California state line on the south, excepting such portions as may have been disposed of by the state prior to July 5, 1947, is vested in the State of Oregon, and is declared to be a state recreation area. No portion of such ocean shore shall be alienated by any of the agencies of the state except as provided by law.[11a]

ORS 274.915 (1967) authorizes the sale or lease of state-owned submersible lands "in the same manner as provided for tide and overflow lands in ORS chapters 273 and 274."[12]

Other statutes affecting title. Legislation enacted in 1872 and amended in 1874[13] gave owners of land adjoining tidelands a right to purchase the tidelands from the state within a limited period. The act was repealed in 1878.[14] Where private land formerly above high water became tideland by gradual changes in the high water mark, such land was held to become the property of the state, and the resultant riparian owner, rather than the former owner of the land now tideland, had the prior right to purchase under the statute.[14a] An upland owner who had not taken advantage of the right to purchase by 1879, when the repealing act took effect, had no further right in the tidelands by virtue of the statute.[15] An owner who purchased from the state under this act would have a title in fee derived from the state, but the Court has questioned what actual additional rights he would acquire:[16] These doubts should apply equally to upland owners who purchase tidelands under the present preference right.

Legislation enacted in 1876[17] granted ("confirmed") title to lands up to the high watermark on the Willamette, Coquille, Coos and Umpqua rivers to the adjoining riparian owners. The statute was repealed in 1878.[18] It has been

held that the federal government was not among the riparian owners who acquired title to submersible lands under this act. Therefore, one who acquired land abutting on one of these rivers from the federal government after the repeal in 1878 acquired no title to lands below the high water mark, such title having remained in the state.[19]

Since 1862, the owner of land abutting on navigable water within the limits of an incorporated town (and since 1963 such an owner within the boundaries of a port) has had the right to build wharves on his property which may extend across the adjacent tideland and beyond the low water mark.[20] The wharfage rights become vested when exercised in accordance with municipal regulation, so that a subsequent purchaser of the tidelands takes subject to them.[21] If there has been no prior exercise of this right by the abutting upland owner, the purchase of tideland from the state carries with it exclusive wharfage rights to deep water.[22]

Allocation of riparian rights between upland and tideland owners.

When ownership of the upland and the abutting tidelands are in different parties, the question of who holds the various riparian rights may arise. The Oregon cases contain no exhaustive discussion of this general question, although the court has stated in dicta that the state as owner of the tidelands has the right to dispose of them free of any interest of the upland owner except such as may be granted by statute.[23] However, in Darling v. Christensen,[24] involving rights on Siltcoos Lake, a navigable body of water, it was held that the owner of land between high and low water, who had purchased this land from the state, held title subject to an easement appurtenant to the abutting property for purposes of access to the water of the lake.

While title to the tidelands remains in the state, however, the rights of the upland proprietor to have free access to the water appear to be preferred where (1) the tideland in question has no use and no value to the state except

as a means of exacting payment; and (2) the upland owner's use of the lands in question is reasonable and not injurious to the public use.[25] The owner's rights should be confined to the facts of this case. The owner's right in such a case is described as "a defeasible right of access and reasonable use thereof - a right which exists only until the state exercises its power to develop the lands or conveys them to someone else."[26]

The right to build a wharf out into navigable water, as discussed above, belongs to the owner of the tidelands where the uplands are in separate ownership unless the wharfage rights had been exercised by the upland owner prior to the state's conveyance of the tidelands.

1. State v. McVey, 168 Or. 337, 345, 121 P.2d 461, 123 P.2d 181 (1942); Shively v. Bowlby, 152 U.S. 1, 57, 14 S.Ct. 548, 38 L.Ed. 331 (1894).

2. Case v. Toftus, 39 F. 730, 731, 5 L.R.A. 684 (1889); Shively v. Bowlby, 152 U.S. 1, 47-48 (1894).

3. Wright v. Seymour, 69 Cal. 122, 10 P. 323, 326 (1886); City of Los Angeles v. San Pedro L.A. & S.L.R. Co., 182 Cal. Rep. 652, 189 P. 449, 450 (1920); Carver v. San Pedro L.A. & S.L.R. Co., 151 F 334, 336 (Cir.Ct.S.D. Cal. 1906).

4. United States v. Oregon, 295 U.S. 1, 14, 55 S.Ct. 610, 79 L.Ed. 1267 (1935).

5. Bowlby v. Shively, 22 Or. 410, 415, 30 P. 154 (1892), affirmed Shively v. Bowlby, 152 U.S. 1, 14 S.Ct. 548, 38 L.Ed. 331 (1894).

6. Lewis v. City of Portland, 25 Or. 133, 159-60, 35 P. 256, 22 L.R.A. 736, 42 Am. St. Rep. 772 (1893).

7. Hinman v. Warren, 6 Or. 408, 412 (1877).

7a. Corvallis & Eastern R. Co. v. Benson, 61 Or. 359, 370, 121 P. 418 (1912).

8. In 1872, a statute was enacted which provided:

> That the owner or owners of any land abutting or fronting upon or bounded by the shore of any bay, harbor or inlet, on the sea-coast of this state, shall have the right to purchase from the state all the tide land belonging to the state, in front of such owner or owners; provided, That if valuable improvements have been made upon any of the tide lands of this state before the title to the land on the shore shall have passed from the United States, the owner of such improvements shall have the exclusive right to purchase the lands so improved, extending to low water mark, for a period of one year from the approval of this act. General Laws of Oregon, 1843-1872, Deady and Lane, p. 644.

In 1874, this section was amended to include the "shore of the Pacific Ocean." Oregon Laws 1874, p. 76. It was repealed in 1878, and the following enacted in its stead:

> Such board of commissioners are further authorized and required to sell. . . tide and overflowed lands on the sea coast, owned by the State, in such quantities as they shall deem most advantageous to the State, not exceeding three hundred and twenty acres to any one person, at a price not less than . . . two dollars per acre for tide lands; Provided, that the owner or owners of any lands abutting or fronting upon or bounded by the shore of the Pacific Ocean, or of any bay, harbor, inlet, lake or water course, shall have the right, for one year following the passage of this act, to purchase all the tide or swamp lands, belonging to the State, in front of the lands so owned, to the amount of one half section to each owner; Provided further, that if valuable improvements have been made upon any of the tide lands of this State, before the title to the land on the shore passed from the United States, the

> owner of such improvements shall have the exclusive right to purchase the lands so improved, extending to low watermark, for the period aforesaid. Oregon Laws 1878, p. 42, sec. 4; p. 54.

The general approach of the 1878 legislation has been retained. The present provisions are found in ORS 274.040 (1967):

> (1) Except as provided in subsection (2) of this section, tide and overflow lands owned by the State of Oregon may be sold or leased only to the highest bidder after being advertised not less than once each week for four successive weeks in two or more newspapers of general circulation in the state, one of which must be of general circulation in the county in which the lands are situated. However:
>
> (a) No such lands shall be sold for less than $5 per acre.
>
> (b) Any owner of lands abutting or fronting on such tide and overflow lands shall have the preference right to lease or purchase at the highest price offered in good faith. This preference does not apply as to any lease offered or issued by the division under ORS 274.615 or 274.705 to 274.860.
>
> (c) No accretions to islands heretofore sold by the state shall be leased.

9. Or. Laws 1876, p. 69, confirming title in riparian owners on the Willamette, Coquille, Coos and Umpqua rivers up to high water mark. Repealed Or. Laws 1878, p. 41.

10. ORS 274.040 (1967).

11. McCarthy v. Coos Head Timber Company, 208 Or. 371, 404, 302 P.2d 238 (1956).

11a. Protection of the Pacific coast began in Oregon in 1899 with legislation which declared, "the shore of the Pacific Ocean between ordinary high and extreme low tide, and from the Columbia river on the north to the south boundary line of Clatsop county on the south" shall be a public highway to "forever remain open as such to the public." Oregon Laws 1898, p. 3. In 1913, this provision was amended to include the full length of the Oregon coast. Oregon Laws 1913, c. 47 sec. 1 (p. 80).

12. As yet there have been no cases dealing with the extent to which the provisions of ORS chapters 273 and 274 are incorporated by this statute. Presumably it will include at least the statutory preference right of the abutting upland owner to lease or purchase the land.

13. General Laws of Oregon, 1843-1872, Deady and Lane, p. 644; Oregon Laws 1874, p. 76. See note 8, supra.

14. Oregon Laws 1878, p. 54.

14a. Wilson v. Shively, 11 Or. 215, 4 P. 324 (1884).

15. Olney v. Moore, 13 Or. 238, 240, 11 P. 187 (1886). However, this case stated that one who had been wrongfully deprived of a chance to exercise his right to purchase did not lose his existing right to sue for wrongful deprivation of title.

16. "I seriously doubt whether that act confers any new right upon the shore-owner in such cases, although he has purchased the land in front of him in accordance with its terms. The title he obtains is subordinate to the public right of passage and navigation, and he had the same wharfage privileges before as afterwards, and the right to protect his uplands from the encroachments of the sea. According to Hale there are three sorts of rights in ports and shores: First, the jus privatum, or right of property or franchise; second, the jus publicum, or public right of passage and navigation; and third, the jus regium, or governmental right. The State could not, by any sale of the shore of a body of water below high tide, deprive itself of the latter right; nor, as before suggested, could it thereby deprive the public of the right of passage or navigation. What, then, can such a sale of that character of tide land amount to? I doubt very much whether a sale in such a case could be made to an outside party that would deprive the riparian owner of any right to the enjoyment of the land." Wilson v. Welch, 12 Or. 353, 359, 7 Pac 341 (1885). For a discussion of wharf rights on navigable waters see Lewis v. City of Portland, 25 Or. 133, 160-169, 35 P 256, 22 LRA 736, 42 Am.St. Rep. 772 (1893).

17. Oregon Laws 1876 p. 69.

18. Oregon Laws 1878 p. 41.

19. State v. McVey, 168 Or. 337, 356, 121 P.2d 461, 128 P.2d 181 (1942).

20. ORS 780.040 (1963). (L. 1862; D.p.934, sec. 1; O.L. 1963 c. 125 sec. 1).

21. Grant v. Oregon Navigation Co., 49 Or. 324, 327, 90 P. 178, 1099 (1907). Regulation by municipal or port authorities is provided for by ORS 780.050 (1963).

22. Grant v. Oregon Navigation Co., 49 Or. 324, 328, 90 P. 178, 1099 (1907). See also Parker v. Taylor, 7 Or. 435, (1879); Parker v. Rogers, 8 Or. 183, (1879).

23. Bowlby v. Shively, 22 Or. 410, 416, 30 P. 154 (1892); State Land Board v. Sause, 217 Or. 52, 342 P.2d 803 (1959).

24. 166 Or. 17, 109 P.2d 585 (1941); The upland owner's right of access to the water is also discussed in Cook v. Dabney, 70 Or. 529, 532, 139 P. 721 (1914) and McCarthy v. Coos Head Timber Company, 208 Or. 371, 387, 302 P.2d 238 (1956).

25. State Land Board v. Sause, 217 Or. 52, 77, 342 P.2d 803 (1959).

26. Id. at 75.

D. Wharfage Rights

An Oregon statute dating from 1862 gives to owners of land adjoining navigable waters the right to wharf out from their land if it is within an incorporated city or, since 1963, within the boundaries of a port.[1] Exercise of the right granted by the statute is subject to municipal or port authority regulation.[2] The statute has been said to be declaratory of the riparian right at common law to build wharves and other structures in aid of navigation in navigable waters.[3] The common-law right is an incident of the ownership of the banks and not dependent upon ownership of the bed,[3a] and the structures may extend out below the low water mark onto the state-owned bed in order to reach the area of practical navigability.[4]

Outside the limits of ports and cities, the right to build wharves, log booms, moorage facilities, and similar structures is recognized by the Oregon court as an incident of riparian ownership, subject to the right of the state and the federal government to regulate and protect navigation.[5]

The "wharfage right" is frequently described as a franchise granted by the state.[6] As such, it is said not to vest until it is exercised, and that the right could be withdrawn by legislation without compensation to riparian owners.[7] But so long as this has not been done, unexercised wharfage rights have received protection under some circumstances, at least within cities where the right is specifically recognized by statute. Thus a riparian owner may prevent obstructions in front of his land which obstruct his wharfage rights and right of access to deep water, without any showing that he intends to exercise the right himself.[8] And it has been held that unexercised rights under the wharfage statute are superior to a city's charter authority to build public wharves and docks, so that if the city builds a wharf in front of a riparian's property, the owner must be compensated for the taking of his wharfage rights.[9]

Wharfage rights are severable from the land, and are not personal to the

riparian owner.[10] Thus they may be granted to others[11] or reserved by the grantor who conveys riparian land,[12] and are subject to loss by prescription.[13]

Where the upland and the tidelands are in separate private ownership, the right to wharf out attaches to the tidelands to the exclusion of the upland owner.[14] But while the title to the tidelands remains in the state, the upland owner apparently may wharf out over state property if it is not being used by the state for public purposes. The anomalous position of the upland owner, whose rights have been described as a "defeasible right of access and reasonable use [of the tidelands] - a right which exists only until the state exercises its power to develop the lands or conveys them to someone else,"[16] is apparently due, at least in part, to the early practice of upland owners of treating the land between high and low water marks as a part of their property, and early legislative provisions to protect those who had made improvements in reliance on this practice.[16a]

Exercise of the wharfage right within a port or city is conditioned upon compliance with any appropriate municipal regulations.[17] The court has read the statute to require an application to the proper local authorities for permission to build the structure.[18] Permissible regulations include the establishing of a wharfage line in the water as the limit to which wharves may extend,[19] but the city has no power to deprive the riparian owner of his wharfage rights or grant them to another by permitting encroachment by a structure in front of adjoining land.[20]

The right to wharf out does not include the right to obstruct navigation, and it has been suggested that a structure which does so, even though it was lawfully constructed and not an obstruction when first built, could be required to be removed without compensation to the owner.[21] This would be a limitation on general language of the court in earlier cases that once built, a wharf

1. ORS 780.040 (1963): "The owner of any land lying upon any navigable stream or other like water, and within the corporate limits of any incorporated town or within the boundaries of any port, may construct a wharf or wharves upon the same, and extend the wharf or wharves into the stream or other like water beyond low-water mark so far as may be necessary and convenient for the use and accommodation of any ships, boats or vessels that may or can navigate the stream or other like water." (L. 1862; O.L. 1963 c. 125 sec. 1).

2. ORS 780.050 (1963): The corporate authorities of the town wherein the wharf is proposed to be constructed, or the commission of any port wherein the wharf is proposed to be constructed if it is not within any town, may regulate the exercise of the privilege or franchise granted in ORS 780.040. Upon application of the person entitled to and desiring to construct the wharf, the corporate authorities or port commission, as the case may be, may by ordinance or other like mode prescribe the mode and extent to which it may be exercised beyond the line of low water mark so that the wharf shall not be constructed any farther into the stream or other water beyond the low-water line than may be necessary and convenient for the purpose expressed in ORS 780.040 and so that it will not unnecessarily interfere with the navigation of the stream or other like water." (L. 1862; O.L. 1963 c. 125 sec. 2).

3. Montgomery v. Shaver, 40 Or. 244, 248, 66 P. 923 (1901).

3a. Coquille Mill & Mercantile Co. v. Johnson, 52 Or. 547, 551-52, 98 P. 132 (1908).

4. ORS 780.040 (1963); Parker v. Taylor, 7 Or. 435, 446 (1879); Montgomery v. Shaver, 40 Or. 244, 66 P. 923 (1901).

5. Coquille Mill & Mercantile Co. v. Johnson, 52 Or. 547, 551-52, 98 P. 132 (1908) (right to maintain log boom in river. But see Port of Portland v. Reeder, 203 Or. 369, 387, 280 P.2d 324 (1955), where the court appears to assume that moorage facilities within an incorporated city were unlawfully maintained below the low water mark because they did not come within the definition of wharves. The court distinguished the Coquille Mill case because it did not involve a question of obstruction to navigation, as did the Reeder case, and stated further: "The court in its opinion referred to wharves and booms and did not in any way indicate that a 'wharf' is to be construed as including a 'boom'. The boom was not located within any city or town having regulatory government authority and was not regulated by statute, as is the case concerning wharves." Id. at p. 387.

6. See, e.g., Parker v. Taylor, 7 Or. 435, 446 (1879); Parker v. Rogers, 8 Or. 183, 190 (1879). See also Montgomery v. Shaver, 40 Or. 244, 248, 66 P. 923 (1901): "It [the wharfage statute] constitutes a license revocable at the pleasure of the legislature until acted upon. . . . The statute is, however, declarative of the right or privilege which existed at common law, the exercise of which might be regulated by statute; but so long as it was not prohibited it existed as a private right derived from the passive or implied license by the public: Gould, Waters, sec. 176." ORS 780.050 (1963) refers to the "privilege or franchise."

7. Bowlby v. Shively, 22 Or. 410, 420, 30 P. 154 (1892), aff'd Shively v. Bowlby, 152 US 1, 14 S.Ct. 548, 38 L.Ed. 331 (1893).

8. Montgomery v. Shaver, 40 Or. 244, 66 P. 923 (1901).

9. Pacific Milling & Elevator Co. v. City of Portland, 65 Or. 349, 133 P. 72 (1913).

10. McCann v. Oregon RR & Navig. Co., 13 Or. 455 (1886); Welch v. Oregon RR & Navig. Co., 34 Or. 447, 56 P. 417 (1899).

11. Id.

12. Parker v. Rogers, 8 Or. 183 (1879).

13. Montgomery v. Shaver, 40 Or. 244, 66 P. 923 (1901).

14. Grant v. Oregon Navigation Co., 49 Or. 324, 328, 90 P. 178, 1099 (1907); Bowlby v, Shively, 22 Or. 410, 30 P. 154 (1892), aff'd Shively v. Bowlby, 152 U.S. 1, 14 S.Ct. 548, 38 L.Ed. 331 (1893); Smith Tug & Barge Co. v. Columbia-Pacific Towing Corp., 250 Or. 612, 443 P.2d 205 (1968).

15. State Land Board v. Sause, 217 Or. 52, 77-78, 342 P.2d 803 (1959) (Log dump maintained on tidelands - doctrine of purpresture apparently rejected); see also McCarthy v. Coos Head Timber Co., 208 Or. 371, 387-88, 302 P.2d 238 (1956); Wilson v. Welch, 12 Or. 353, 359, 7 P. 341 (1885).

16. State Land Board v. Sause, 217 Or. 52, 74-75, 342 P.2d 803 (1959).

16a. See Bowlby v. Shively, 22 Or. 410, 420, 30 P. 154 (1892).

17. Portland v. Montgomery, 38 Or. 215, 62 P. 755 (1900); Montgomery v. Shaver, 40 Or. 244, 66 P. 923 (1901); Port of Portland v. Reeder, 203 Or. 369, 280 P.2d 324 (1955).

18. Port of Portland v. Reeder, 203 Or. 369, 280 P.2d 324 (1955).

19. Portland v. Montgomery, 38 Or. 215, 62 P. 755 (1900).

20. Montgomery v. Shaver, 40 Or. 244, 66 P. 923 (1901).

21. Port of Portland v. Reeder, 203 Or. 369, 280 P. 324 (1955).

22. Lewis v. City of Portland, 25 Or. 133, 35 P. 256, 22 LRA 736, 42 Am. St. Rep. 772 (1893).

E. Right of Access Generally

One of the most valuable and carefully protected rights of a riparian owner is his right of access to the water.[1] It is essential to his exercise of whatever other rights in the water he possesses, and the Oregon Supreme Court gives special consideration to its preservation. This right has frequently been cited as underlying the rationale of the doctrine of accretion,[2] and in a doubtful case may influence the court in its decision as to whether a particular tract is to be considered an accretion to the riparian land. In Taylor Sands Fishing Co. v. State Land Board[3] the court held that even if plaintiff's land, which it had acquired from the state as tidelands, were completely overflowed by each high tide, it would nevertheless be susceptible of increase by accretion. To hold otherwise could deprive the land of its principal value by allowing the state to claim title to newer deposits along the water and to dispose of them to others, depriving it of his access.[4]

In determining the location of the boundary line between riparian owners on opposite shores of a non-navigable river, the court decreed that the center of the river should be found by measurement at low-water mark rather than high-water mark where this was necessary to protect the right of access to the water at all its stages.[5] A measurement at high water in that case would have placed the boundary line on land which was exposed at low water, thus making it necessary for one owner to cross land belonging to the opposite owner in order to reach the water during its low stages, and the court would not permit this.

A tidelands owner's right of access to the water will be protected against interference by commercial fishermen. Even though they have a license to fish in navigable waters opposite the land in question, they may not position their equipment in such a way as to interfere with the riparian right of access to navigable water, or to prevent the riparian owner from fishing from his own lands.[6]

By virtue of his right of access to the water, an upland owner had standing to have set aside a state conveyance to lands adjacent to his which were conveyed as tide lands, but which were in fact a part of the bed of the river and which the state had no authority to convey.[7]

On navigable waters the question sometimes arises as to who is the riparian owner. On such waters, United States patents typically convey only to the high water mark and land below that is owned by the state as part of the bed of the body of water.[8] The land between high and low water marks, however, is frequently sold or leased by the state to private parties. The fate of the upland owner's right of access to the water in such circumstances is the subject of some confusion in the cases.

It appears that the state, as the owner of lands below high water mark which have not been conveyed, cannot interfere with the access of the upland owner by virtue of its ownership alone.[9] The court has not decided a case where the state wanted to use such lands in a way which would prevent the upland owner from reaching the water, although there is some indication that it could do so.[10]

Where tidelands are concerned, it is now clear that the state may dispose of them free of any right of access in the upland owner, and all rights to the water appear to be in the owner of the tidelands.[11] On non-tidal waters, however, the court held in Darling v. Christensen[12] that the upland owner retains a right to cross the land below high water mark in order to reach the water, even after that land had been conveyed by the state and was in private ownership. The facts of this case are somewhat confused. The upland had been platted, and the plat had provided for common "driveways" to reach the water. Later the land below the high water mark was conveyed to another party who claimed exclusive right of access to the water. The court held that the upland owners had had a right of access to the lake which was not lost, and that the title to

the land below high water mark was subject to "the right of the littoral or riparian owners . . . which littoral right includes access to Siltcoos lake over the respective easements appurtenant to the property abutting upon the property in suit . . ." The court did not elaborate on the appurtenant easements which it mentioned, although presumably they were those shown on the original plat of the upland. However the holding apparently does not depend upon specific easements, but is based on riparian rights. In a recent case which involved the rights of tidelands owners,[13] the court reviewed the authorities and noted (but did not reconcile) the different treatment of non-tidal waters. The holding of Darling v. Christensen is said to be that "an upland owner had the right of access over submersible land held by a grantee of the State."[14]

1. This right has been described as the right to be free from interference with both actual uses and possible prospective uses whether presently planned or not. To be entitled to relief, the riparian owner need show only encroachment. Tauscher v. Andruss, 240 Or. 304, 308, 401 P.2d 40 (1965).

2. State v. Imlah, 135 Or. 66, 74, 294 P. 1046 (1931); Van Dusen Investment Co. v. Western Fishing Co., 63 Or. 7, 20, 124 P. 677, 126 P. 604 (1912); Fellman v. Tidewater Mill Co., 78 Or. 1, 7-8, 152 P. 268 (1915). For other cases protecting or discussing the right of access see Fellman v. Tidewater Mill Co., 78 Or. 1, 152 P. 268 (1915); Hanson v. Thornton, 91 Or. 585, 179 P. 494 (1919); Fitzstephens v. Watson, 218 Or. 185, 197, 344 P.2d 221 (1959); Tauscher v. Andruss, 240 Or. 304, 401 P.2d 40 (1965); Hoff v. Peninsula Drainage District, 172 Or. 630, 638-39, 143 P.2d 471 (1943).

3. 56 Or. 157, 108 P. 126 (1910).

4. Id. at 161-62.

5. Micelli v. Andrus, 61 Or. 78, 12o P. 737 (1912).

6. Eagle Cliff Fishing Co v. McGowan, 70 Or. 1, 137 P. 766 (1914); Johnson v. Jeldness, 85 Or. 657, 167 P. 798 (1917).

7. Cook v. Dabney, 70 Or. 529, 139 P. 721 (1914).

8. United States v. Oregon, 295 U.S. 1, 14, 55 S.Ct. 610, 79 L.Ed. 1267 (1935); United States v. Utah, 283 U.S. 64, 51 S.Ct. 438, 75 L.Ed. 844 (1940).

9. State Land Board v. Sause, 217 Or. 52, 77-78, 342 P.2d 803 (1959) (alternative holding; the court found as a fact that there existed no tidelands in front of plaintiffs and to which the state could claim title. Id. at p. 102.) See also McCarthy v. Coos Head Timber Co., 208 Or. 371, 387, 302 P.2d 238 (1956).

10. Id. at 77-78.

11. Smith Tug & Barge Co. v. Columbia-Pacific Towing Corp., 250 Or. 612, 443 P.2d 205 (1968). (This case contains an extensive review of the Oregon cases bearing on the relative rights of upland and tideland owners); Bowlby v. Shively, 22 Or. 410, 422-23, 30 P. 154 (1892) affm'd 152 U.S. 1, 14 S.Ct. 548, 38 L.Ed. 331 (1893).

12. Darling v. Christensen, 166 Or. 17, 109 P.2d 585 (1941). The court in this case made no express distinction between tidal and non-tidal waters. See Lewis v. City of Portland, 25 Or. 133, 160-61, 35 P. 256, 22 LRA 736 (1893) where this distinction is made, and a discussion of these cases in Smith Tug & Barge Co. v. Columbia-Pacific Towing Corp., 86 Or. Adv. Sh. 913, 936-37, 443 P.2d 205 (1968).

13. Smith Tug & Barge Co. v. Columbia-Pacific Towing Corp., 250 Or. 612, 443 P.2d 205 (1968).

14. Id. at 937.

III DETERMINING BOUNDARIES OF WATER LANDS

This section examines some of the rules in connection with determining the exact boundaries of water lands. These lands often cause special problems because of the tendency of waters to change course and to rise and fall within their beds, and the tendency of conveyances along water lands to identify the boundaries imprecisely.

A. Accretion, reliction, and avulsion[1]

Accretion is the gradual and imperceptible increase of land resulting from the accumulation of alluvion by natural causes along a water boundary.[2] Reliction is an increase in land caused by the permanent subsidence of a body of water which causes additional land to be exposed.[3] The same law attaches to both land acquired by accretion and land acquired by reliction.[4]

Avulsion is the sudden and violent change of the course of water and is to be distinguished from accretion and reliction with regard to the legal consequences.[5]

In determining whether change is by accretion or avulsion the test is not whether witnesses might see from time to time that change was occurring, but rather whether witnesses could perceive change while it was going on.[6] The rebuttable presumption is that all changes are by accretion and reliction.[7]

Natural Changes

As a riparian one is entitled to all accretions or relictions to his soil whether his land abuts navigable or non-navigable water.[8] When a river course changes by avulsion, the boundary established by the official survey of the land and not the migratory channel of the river is determinative.[9]

Thus, it has been said that changes in the channel of a navigable river by avulsion do not affect the State's title to that part of the former bed below the ordinary low-water mark. Changes due to accretion cause the title of the State to follow the river and title to the former bed thereby vests in the owners of the adjacent upland.[10] Conversely, land formerly conveyed to a landholder which

is inundated by navigable waters by the gradual and imperceptible eroding away of the bank becomes the property of the State as part of the bed of the river. This is true regardless of how the conveyance describes the land.[11]

In cases of avulsion in navigable streams, the state retains title to the old bed, and apparently does not acquire title to the land under the new course of the stream, even though the water remains navigable.[12] Rather, the owner whose lands are now inundated retains title subject to the jus publicum -- the rights of the public in navigable waters -- but may reclaim the land under the water, or claim it if it re-emerges.[13]

Artificial Changes. Although the definitions of accretion and avulsion refer to natural changes only, the same rules are generally applied to artificial changes. Thus gradual changes in the course of a stream resulting from artificial alterations of the bank made by a third party (and perhaps in exceptional cases by the claiming riparian owner himself)[14] are governed by the rules relating to accretion.[15] By the same token, sudden artificially caused changes do not alter the boundary.[16]

However, in a dispute between two private parties over title to dredging spoils deposited along riparian land by the State, the court held that in the absence of any claim by the State the riparian owner was entitled to the new land, on the reasoning that riparian owners ought to remain riparian where possible.[17] The court expressly reserved comment on whether or not the State might have title.[18]

There is no vested right to future accretions. Thus, a jetty constructed by the United States which prevented further accretion to riparian land did not render the United States liable in damages even though the land was gradually being lost by erosion which had been offset in the past by the complementary process of accretion.[19]

Special rules apply to land exposed by the artificial drainage of lakes

meandered by federal survey. Legislation originating in 1913[20] provides that the riparian owner acquires title to only "so much of the submersible and submerged lands reclaimed by such drainage as is required to fill out the least fractional subdivision or subdivisions of any section owner by such riparian owners and which is rendered fractional by the meander line of such lake; . . ."[21]

1. An extended discussion of this subject appears in Justice Rossman's opinion in State Land Board v. Sause, 217 Or. 52, 342 P.2d 803 (1959). Especially see pages 78-102 where numerous examples have been set out. Much use of that material has been made in the text which follows. Although Rossman's comments were dicta, they appear to be based on a diligent search of the subject matter. Also, see Comment, Avulsion and Accretion, 3 Willamette L. Jr. 345 (1965).

2. Katz v. Patterson, 135 Or. 449, 452, 296 P. 54 (1931).

3. Hanson v. Thornton, 91 Or. 585, 590, 179 P. 494 (1919).

4. Ibid.

5. Purvine v. Hathaway, 238 Or. 60, 393 P.2d 181 (1964). This opinion by Justice O'Connell examines some of the reasons for distinguishing accretion and reliction from avulsion. Avulsion does not include the sudden influx of additional water into the stream, thus changing the level of the water lines, without an accompanying change in the course of the stream.

6. State Land Board v. Sause, 217 Or. 52, 79, 342 P.2d 803 (1959).

7. Wyckoff v. Mayfield, 130 Or. 687, 280 P. 340 (1929).

8. Gubser v. Town and Stautenberg, 202 Or. 55, 273 P.2d 430 (1954).

9. Rohner v. Neville, 230 Or. 31, 365 P.2d 614, 368 P.2d 391 (1962).

10. 23 Ops. Att'y. Gen. Or. 256; 28 Or. L. Rev. 275, n. 53.

11. 28 Ops. Att'y. Gen. Or. 55.

12. Bohn v. Albertson, 107 CA2d 738, 238 P.2d 128 (1952); Fowler v. Wood, 73 Kan. 686, 85 P. 763 (1906); Wallace v. Driver, 61 Ark. 429 (1896).

13. Bohn v. Albertson, 107 CA2d 738, 238 P.2d 128, 135 (1952); Fowler v. Wood, 73 Kan. 686, 85 P. 763, 770 (1906). There are no Oregon cases in point. However, the Atty Ge. has concluded that the state acquires title to lands inundated by navigable waters resulting from the construction of a dam. 24 Ops. Att'y. Gen. 323; see also Cooley v. Golden, 117 Mo. 33 (1893). But see 26 Ops. Att'y Gen. 167 for a later opinion applying the conventional rules of avulsion to navigable waters.

14. See Kansas v. Meriwether, 182 F. 457 (8th Cir. 1910), discussed in State Land Board v. Sause, 217 Or. 52, 99, 342 P.2d 803 (1959).

15. 134 ALR 467, State Land Board v. Sause, 217 Or. 52, 88, 342 P.2d 803 (1959).

16. State Land Board v. Sause, 217 Or. 52, 88, 342 P.2d 803 (1959).

17. Gillihan v. Cicloha, 74 Or. 462, 467, 145 P. 1067 (1915).

18. Id.

19. Latourette v. United States, 150 F. Supp. 123 (D. Or. 1957).

20. O.L. 1913 c. 11 sec. 6 (p. 29).

21. Now ORS 274.440(2) (1967). This provision was invoked by the court as an alternate ground of decision in Luscher v. Reynolds, 153 Or. 625, 633, 56 P.2d 1158 (1936).

B. Right to accretions

A riparian owner is entitled to all accretions to his land.[1] The accretion must begin upon the land of the party who is claiming it. He may not claim title to alluvion which attached originally to the land of another and gradually extended so as to reach his land.[2] The deposit of alluvion may change the location of the thread of a stream so that accretions attaching on one side may extend beyond the line originally dividing that parcel from the one opposite it on the other side of the stream.[3] Indeed, the reciprocal processes of erosion or submersion and accretion over years may have the effect of entirely eliminating a tract of land and later depositing another tract in the same place but under different ownership.[4] Conversely, an island may "move" as a result of erosion and accretion so far that it is entirely outside the original legal description, while title in the original owner remains unimpaired.[5]

On tidal navigable waters title to land formed by accretion is in the tide-land owner rather than the state,[6] unless it originates as an island (i.e., an "accretion" to the bed), in which case title is in the state, even though the island may eventually be extended so as to attach to the shore. An island arising in a non-navigable stream belongs to the riparian owner on whose portion of the bed it originally arose.[7]

The rules on lakes are the same as on rivers,[8] except as specially treated by statute.[9] Additions to the land of a littoral owner are more likely to come about by reliction -- the gradual lowering of the lake waters -- than by accretion strictly speaking, but the rules governing the two processes are the same, and the words are often used interchangeably.[10]

The rules governing accretion are easy to state, but particularly difficult of application. Evidence is often conflicting. It frequently consists of testimony by long-time residents of an area as to their recollections of exactly

how changes in a stream came about and when. Even when not in serious conflict such testimony is often confusing because it will not present a continuous history of these changes, but statements of conditions as they existed at various points in time. From such testimony, sometimes aided by old maps and surveys, the court must determine just what processes were taking place at the points in question at various times. The trial court's findings of fact may be heavily relied upon even though many of the cases involving these matters are suits in equity and thus subject to an independent review of the evidence by the Oregon Supreme Court.[11] In addition to observing the demeanor of the witnesses, the trial judge may have visited the site, and often has a considerable advantage in having seen where witnesses were pointing on maps and diagrams, which points may be referred to in the transcript only as "here" and "there."[12]

In one case the Supreme Court in effect threw up its hands when neither party claiming certain alluvion could show by a preponderance of the evidence that it originally attached to his lands. The trial court found that neither party had established a right to the alluvion, but the Supreme Court said that the evidence did indicate that some or all of the parties were entitled to the land, and exercising its equitable powers awarded half of a disputed sand bar to the owners on each side of the channel.[13]

1. Kingsley v. Jacobs, 174 Or. 514, 528, 149 P.2d 950 (1944); Gubser v. Town and Stoutenberg, 202 Or. 55, 72, 273 P.2d 430 (1954); Minto v. Delaney, 7 Or. 337 (1879); State v. Imlah, 135 Or. 66, 73, 294 P. 1046 (1931).

2. Pearcy v. Bybee, 20 Or. 385, 26 P. 233 (1891); Gubser v. Town and Stoutenberg, 202 Or. 55, 72, 273 P.2d 430 (1954).

3. Kingsley v. Jacobs, 174 Or. 514, 528, 149 P.2d 950 (1944).

4. Gubser v. Town and Stoutenberg, 202 Or. 55, 273 P.2d 430 (1954).

5. Van Dusen Investment Co. v. Western Fishing Co., 63 Or. 7, 18, 124 P. 677, 126 P. 604 (1912).

6. Fellman v. Tidewater Mill Co., 78 Or. 1, 152 P. 268 (1915); Taylor Sands Fishing Co. v. State Land Board, 56 Or. 157, 108 P. 126 (1910).

7. State v. Imlah, 135 Or. 66, 294 P. 1046 (1931).

8. Cawlfield v. Smyth, 69 Or. 41-47, 138 P. 227 (1914).

9. ORS 274.430 (1) (1967): "All meandered lakes are declared to be navigable and public waters. The waters thereof are declared to be of public character. The title to the submersible and submerged lands of such meandered lakes, which are not included in the valid terms of a grant or conveyance from the State of Oregon, is vested in the State of Oregon." (3): "Nothing in this section impairs the title of any upland or riparian owner to or any vested rights in land which was added prior to May 25, 1921, by natural accretion or reliction to the lands of such upland owner."

   ORS 274.440 (1967): "(1) There are no vested rights in or to any future accretion or reliction to the lands of any upland or riparian owner on any meandered lake. No person shall acquire any right, title or interest in or to the submerged or submersible lands of any such lakes, or any part thereof, by reliction, accretion or otherwise, or by reason of the lowering or drainage of the waters of such lakes, except as provided by statute."

   ORS 274.210 to 274.250 (1967) provide for contracts by the Division of State Lands for the drainage of any lake, marsh, or swamp within the state and sale or disposal of the reclaimed bed. ORS 274.260 provides "The title of owners of land riparian to lakes and ponds drained under ORS 274.210 to 274.270 extends to only so much of the bottom or bed of such lake or pond which may be reclaimed by such drainage as is required to fill up the fractional subdivision or subdivisions of a section which he owns and which are rendered fractional by such lake or pond, and the title of such owner is so limited when the waters of such lake, or pond receding, because of such drainage, uncover the bed thereof. (2) This section shall not affect the right of riparian owners to land acquired by natural accretion or reliction because of the gradual and natural recession of the waters of the lake or pond to which the lands of such owners are riparian."

The Oregon Supreme Court has not had occasion to deal with ORS 274.210 ff. Although the statute in terms covers "any lake" within the state, other provisions indicate that these sections are probably intended to apply only to lands to which the state has title (for example, lands acquired under the federal Swamp Lands Act. Act Sept. 28, 1850, ch. 84; 9 Stat. 519; Act. Mar. 12, 1860, ch. 5, 12 Stat. 3.) See especially, ORS 274.240(2) providing for compensation to be paid the state for the reclaimed lands, and 274.240(3) providing for quitclaim deeds from the state to purchasers of the reclaimed lands. See also 24 Ops. Att'y Gen. 358, 359 (1948-50).

10. See, e.g., Cawlfield v. Smyth, 69 Or. 41, 138 P. 227 (1914); Hanson v. Thornton, 91 Or. 585, 590, 179 P. 494 (1919).

11. ORS 19.125(3) (1965): "Upon an appeal from a decree in a suit in equity, the cause shall be tried anew, upon the record." See, for example, Gubser v. Town and Stoutenberg, 202 Or. 55, 273 P.2d 430 (1954); Fellman v. Tidewater Mill Co., 78 Or. 1, 152 P. 268 (1915); Van Dusen Investment Co. v. Western Fishing Co., 63 Or. 7, 124 P. 677, 126 P. 604 (1912); Pearcy v. Bybee, 20 Or. 385 (1891); Katz v. Patterson, 135 Or. 449, 296 P. 54 (1931).

12. See, for example, Gubser v. Town and Stoutenberg, 202 Or. 55, 66, 273 P.2d 430 (1954).

13. Pearcy v. Bybee, 20 Or. 385 (1891).

C. Meander lines as boundaries

"A meander line is one run along a stream or body of water for the purpose of establishing the course of the bank of such stream or body of water, and to procure data with which to plat fractional sections and compute the area thereof."[1] Public lands conveyed with reference to meander lines are bounded by the water itself, not by the survey meander lines,[2] unless there is a discrepancy between the meander line and the water's edge so marked as to leave a large tract of land between the two; in such a case a conveyance to the meander line does not carry title to the omitted tract, and does not run to the water's edge.[3]

A description by meander lines will not control if no body of water in fact existed at the point meandered. Where this is shown to be the case, official surveys, plats and maps indicating otherwise must give way to the proven facts.[4] The rationale is that if no body of water existed, a purchaser could not have been misled by the "representations" contained in the survey.

1. Clark, F.E., A Treatise on the Law of Surveying and Boundaries 627 (3rd Ed. 1959). Micelli v. Andrus, 61 Or. 78, 120 P. 737 (1912).

2. State v. Imlah, 135 Or. 66, 72, 294 P. 1046 (1931). Sun Dial Ranch v. May Land Co., 61 Or. 205, 119 P. 758 (1912); Wyckoff v. Mayfield, 130 Or. 687, 280 P. 340 (1929); Armstrong v. Pincus, 61 Or. 156, 158 P. 662 (1916); French Live Stock Co. v. Springer, 35 Or. 312, 58 P. 102 (1899).

3. Little v. Pherson, 35 Or. 51, 54, 56 P. 807 (1899); Barnhart v. Ehrhart, 33 Or. 274, 54 P. 197 (1898). This rule is to protect against fraud or mistake and is not to be invoked where the divergence is explainable. Thus, in the Malheur Lake dispute where the lake area varied from 11,000 to 80,000 acres the plaintiff was not permitted to invoke the rule. U.S. v. Otley, 127 F.2d 988 (9th Cir. 1942).

4. French Live Stock Co. v. Springer, 35 Or. 312, 323, 58 P. 102 (1899).

D. Locating the thread of a stream

The general Oregon rule is that the title of a riparian owner extends to the "center or thread" of an adjoining non-navigable body of water.[1] A statutory rule of construction provides that conveyances of such lands shall be read as conveying to the thread of the stream.[2] Because United States patents are ordinarily construed according to local law,[3] title to the center of the bed of a non-navigable river will be acquired by the patentee of adjoining riparian land. The same is true of land adjoining a non-navigable lake.[4]

Oregon's leading case on the precise location of the line, and the only case in which the Oregon Supreme Court has found it necessary to discuss the matter in detail, is Micelli v. Andrus.[5] In that case in which plaintiff and defendant were riparian owners on opposite banks, the trial court located the boundary line by measuring between the banks at the ordinary high water mark and found the middle line to run along a bar that was exposed at low water and connected to defendant's land. The supreme court held this method incorrect, and said that the correct line would be "a line equidistant from all points on opposite banks at right angles with the thread of the stream at the lowest state of water therein," which line would not necessarily be in the center of the channel.[6]

It is not clear from the opinion in what sense the court is using the word "thread." It cannot be synonymous with the boundary between the lands of the opposite riparian proprietors, since the "thread" is to be used in constructing that line. Clark says in his treatise[7] that, although "thread" is often used to mean the middle line between the shores, its technical meaning is the center of the main channel.

The court in Micelli used the low water mark in order to protect plaintiff's access to all of his land at all stages of the water. This was necessary because

use of the high water mark as a reference produced a boundary line on land which was exposed at low water, thus producing a strip of land belonging to defendant between plaintiff's land and the water. The possibility of using the "ordinary" level of the water when so doing would produce a line wholly under water at all stages of the river was not foreclosed.[8]

1. Wyckoff v. Mayfield, 130 Or. 687, 280 P. 340 (1929); Kingsley v. Jacobs, 174 Or. 514, 523-24, 149 P.2d 950 (1944).

2. ORS 93.310 (1967): The following are the rules for construing the descriptive part of a conveyance of real property, when the construction is doubtful. . . (4) When a road or stream of water not navigable is the boundary, the rights of the grantor to the middle of the road, or the thread of the stream, are included in the conveyance, except where the road or bed of the stream is held under another title.

3. United States v. Oregon, 295 U.S. 1, 27, 55 S.Ct. 610, 79 L.Ed. 1267 (1935).

4. Luscher v. Reynolds, 153 Or. 625, 56 P.2d 1158 (1936).

5. 61 Or. 78, 120 P. 737 (1912).

6. Id. at 86.

7. Clark, F.E., A Treatise on the Law of Surveying and Boundaries 621 (3rd Ed. 1959).

8. 61 Or. 78, 87, 120 P. 737 (1912).

E. Locating high and low water marks

The location of these lines is a jury question, and they may be determined by the jury after viewing the premises.[1]

The high water mark is "the point to which the water usually rises, in an ordinary season of high water,"[2] and is distinguishable by examination of the condition of the premises to determine "where the presence and action of water are so common and usual and so long continued in all ordinary years as to mark upon the soil of the bed a character distinct from that of the banks."[3]

The Oregon court has not had to deal with the precise location of the low-water mark. In a discussion of high and low water marks generally, the court described the low water mark as being shown by the river's "lessened range of flow by summer heats."[4] The line should be determined according to the level of the water during the ordinary low water stages rather than in periods of drought.[5]

Legislation enacted in 1967 provides when high and low water marks "cannot be determined by survey or inspection, then such lines shall be determined by the use of the annual mean high or mean low water for the preceding year."[6]

1. Johnson v. Knott, 13 Or. 308, 310-11, 10 P. 418 (1886).

2. Id. at 310.

3. Pacific Elevator Co. v. Portland, 65 Or. 349, 389, 133 P. 72 (1913); Sun Dial Ranch v. May Land Co., 61 Or. 205, , 119 P. 758 (1912).

4. Sun Dial Ranch v. May Land Co., 61 Or. 205, 216, 119 P. 758 (1912).

5. 28 Ops. Att'y Gen. 55, 56 (1956-58).

6. ORS 274.015 (1967).

F. Locating high and low tide lines.

No cases have been found in which the Oregon court has had to determine the exact boundaries of tidelands. In discussing their location, the court generally speaks in terms of high and low water at "ordinary" tides.[1] ORS 273.251(6) (1967) defines tide and overflow lands as "All lands over which the tide ebbs and flows from the line of ordinary high tide to the line of mean low tide. . ." (emphasis added).

The line of ordinary high tide marks the boundary between land acquired by the state upon admission to the Union and that remaining in the ownership of the federal government. For purposes of determining this boundary, federal law controls.[2] In accordance with United States Coast and Geodetic Survey procedures, the United States Supreme Court has held the line to be the mean of all high tides over a period of 18.6 years (the normal periodic variation in the tidal cycle).[3]

The line of mean low tide marks the boundary between "tidelands" and the bed proper. Since the beds of tidal inland waters were acquired in their entirety by the state upon admission to the Union,[4] location of this line in the case of inland waters should be a matter of state law.

In Van Dusen Investment Co. v. Western Fishing Co.,[5] which involved an island in the Columbia River, the court took judicial notice of United States Coast and Geodetic Survey standards and held that the island was not tideland because not uncovered by "mean lower low water," but only during extraordinary low water.[6] The court adopted the lower low water mark rather than the average of all low tides because of the importance to the tideland owner of access to the water at all times.[7]

In United States v. California[8] the United States Supreme Court approved a similar standard for application along the coast lines to determine the inner limit of submerged lands granted by the States by the Submerged Lands Act. In so doing, the Court was interpreting the words "line of ordinary low water" in

the Act.[9] Andrus v. Knot[10] held that there was no tideland at a point on the Willamette River in East Portland where the tide rose and fell two feet eight inches at low stages of the river, but only a few inches at high stages of the river, and no part of the shore was covered and uncovered daily by the tides throughout the year.

1. E.g., Bay City Land Co. v. Craig, 72 Or. 31, 38, 143 P. 911 (1914); Harby v. California Trojan Power Company, 109 Or. 76, 81, 219 P. 197 (1923); Taylor Sands Fishing Co. v. State Land Board, 56 Or. 157, 160, 108 P. 126 (1910).

2. Borax Consolidated Ltd. v. Los Angeles, 296 U.S. 10, 22, 56 S.Ct. 23, 80 L.Ed. 9 (1935).

3. Id. at 27; see also United States v. Washington, 294 F.2d 830, 834 (9th Cir. 1961): ". . . the high-water mark means the line of high water as determined by the course of the tides, not as determined by physical markings made upon the ground by the water. The latter method of making this determination . . . is appropriate only in the case of streams, and other non-tidal waters which have no absolute ascertainable level because of variations of flow from a multitude of causes."

4.

5. 63 Or. 7, 124 P. 677, 126 P. 604 (1912).

6. Id. at 17-18.

7. On the Pacific Coast, there are two tides daily, one of which is generally lower than the other. See discussion in United States v. California, 381 U.S. 139, 175-76, 85 S.Ct. 1401, 14 L.Ed. 296 (1965).

8. 381 U.S. 139, 85 S.Ct. 1401, 14 L.Ed. 2d 296 (1965).

9. Id. at 175-76.

10. 12 Or. 501, 8 P. 763 (1885).

IV OTHER WATER RELATED LANDS

A. Islands

Litigation over title to islands involves both determination of who holds title to the bed of the water and application of the laws of accretion.

In Navigable Waters

Title to islands in navigable waters is dependent on when the island was formed and its size.

Formed Prior to Statehood. The Supreme Court of the United States has held that islands existing in navigable waters at the time of the State's admission to the Union are not part of the bed of the stream and consequently do not pass to the State upon admission to the Union, but rather remain part of the public domain. Furthermore, errors in omitting such islands from official government surveys do not divest the United States of title nor prejudice its later claim of title.[1] Some cases indicate however that the government may forfeit its title to worthless, low-lying islands omitted from its surveys by refusing to survey or otherwise claim them when such omission is pointed out.[2]

Despite these decisions by the Supreme Court of the United States, there exists a tacit assumption by the Oregon Supreme Court that the title to such islands resides in the State. This assumption probably arises because of the generalization that the State owns all lands between high water marks of navigable rivers. This statement properly interpreted means the State owns the bed of navigable waters, but can be misconstrued to mean that everything between the banks belongs to the State.

Thus, in a 1958 Oregon case Justice Warner, writing the majority opinion in Freytag v. Vitas flatly declared "[T]he State of Oregon from and after February 14, 1859 . . . became the owner of the river bed [Willamette] and all islands situated therein, lying between high water marks of the banks of the river."[3]

The Freytag case was a quiet title action involving a dispute among riparian landholders over ownership of a gravel bar. The gravel bar was connected with the riparian owners' land by a neck which was exposed during periods of low water. The state intervened asserting title to the bar. The issue, as viewed by the court, was whether the bar had been formed by accretion to the mainland (in which case the riparians would have title) or by accretion to a former island which was now part of the bar (in which case title would be vested in the owner of the island). The State's theory consisted of three propositions: (1) the State became the owner of all islands between high water marks of navigable rivers upon admission to the Union; (2) by act of 1874[4] riparians on the Willamette were granted title to land between high and low water, but this grant was repealed by an 1878 act[5] and subsequently formed tidelands which were not accretions to already granted tide lands were not conveyed; and (3) the parcel involved, being an island from 1874 to 1878, was not granted by the 1874 act, and subsequent accretion connecting it with the mainland would not divest the owner of the former island of title even when the island became tideland.

The State then produced an 1852 map drawn by the Surveyor General showing the parcel was an island at that time. The riparian owners were unable to produce contradictory evidence and therefore title was held to be in the State, rendering it unnecessary to resolve the dispute between the individual riparians.[6]

Viewing the case from the perspective of the Moss and Lattig cases cited in footnote 1, it would seem the State had proved itself out of Court. If the State's 1852 map proved the bar was an island from 1874 to 1878 it even more certainly proved it was an island in 1859 when the State was admitted to the Union, and therefore it remained a part of the public domain and the State had no title. But this possibility was raised neither in the appellate brief nor in the Supreme Court opinion. This omission can possibly be traced to the fact that the State's evidence indicated overflow of the island during high water,[7] but is more likely

traceable to the riparian's being so interested in proving title in themselves that they failed to note this fault in the State's title.

No Oregon case has been found which recognizes that the title to islands in navigable rivers did not pass to the State upon admission to the Union. However, in view of the federal decisions of Moss and Lattig, this federal question seems to have been resolved in favor of the Federal Government. This casts doubt upon the validity of the Oregon cases to the contrary.[8]

Formed Subsequent to Statehood. Because accretion to land belongs to the owner of the land, the title to islands in navigable waters formed after the State's admission to the Union is vested in the State.[9] This position was affirmed by a 1960 decision that accretion to an island formed on the Oregon side of the Snake River about 1890 which eventually connected the island with the shore line did not destroy the State's title in the island and the accretion thereto.[10] If, on the contrary, the accretion is to the upland and builds out into the stream the State has no title and thus is deprived of title to the land under the accretion.[11]

In Non-navigable Waters.

Title to islands in non-navigable waters is dependent on when the island was formed and who owns the bed.

Existing at Time of Federal Patent. Islands situated in non-navigable waters do not impliedly pass with the conveyance by the United States of the adjacent riparian lands. However, it is a question of fact whether an island is of substantial quantity and its surface sufficiently high to prevent its conveyance with the adjacent land. Small permanent projections not surveyed because considered impractical of reservation should be considered as having been conveyed.[12]

Forming after land is patented. The Oregon Supreme Court holds that a federal grant of land bordering non-navigable waters conveys to the center of the stream or lake. It would thus seem that any islands forming after the adjacent

riparian land was patented would belong to the riparian owner or owners as accretion to their land (i.e., the bed of the lake or stream). However, no Oregon cases have been found which address this issue. Nor have any cases been found construing conveyances of land adjacent to islands which lie in the bed of non-navigable waters. Presumably such islands would pass along with a conveyance of the upland unless a contrary intent was expressed.

1. Scott v. Lattig, 227 U.S. 229, 241, 244, 33 S.Ct. 242, 5 L.Ed. 490 (1912); Moss v. Ramey, 239 U.S. 538, 546, 36 S.Ct. 183, 60 L.Ed. 425 (1915).

2. Whitaker v. McBride, 197 U.S. 510, 515 ( ).

3. Freytag v. Vitas, 213 Or. 462, 465, 326 P.2d 110 (1958).

4. Laws of 1874, p. 76.

5. Laws of 1878, pp. 54-55.

6. Freytag v. Vitas, 213 Or. 462, 326 P.2d 110 (1958).

7. Respondent's brief, p. 8.

8. For a post Moss and Lattig federal case in which the executive branch of the Federal Government apparently admits title to an island in the Columbia to have once been vested in the State see United States v. Columbia River Packers Ass'n, et al., 11 F. Supp. 675 (D. Or. 1955).

9. 19 Or. Att'y Gen. Ops. 411.

10. Strausbough v. Babler Bros., 220 Or. 35, 348 P.2d 448 (1960).

11. Gubser v. Town of Stoutenburg, 202 Or. 55, 273 P.2d 430 (1954).

12. United States v. Otley, 127 F.2d 988, 1001 (9th Cir. 1942).

B. Swamp Lands

The Federal Swamp Land Act of 1850 granted:

> . . . the whole of the swamp and overflowed lands, made unfit thereby for cultivation, and remaining unsold on or after the 28th day of September, A.D. 1850, . . . to the several States respectively, in which said lands are situated.[1]

and required the Secretary of the Interior to plat such lands and send lists of them to the states, and to issue patents to the swamp lands to the states upon request of the governor. The proceeds of the sale of the lands were to be applied by the states to the reclamation of the lands in question.[2]

In 1860, the effect of this act was extended to Oregon,

> Provided, That the grant shall not include any lands which the Government of the United States may have sold or disposed of under any law, enacted prior to March 12, 1860, prior to the confirmation of title to be made under the authority of said Act. . .[3]

There was considerable delay on the part of the Secretary of the Interior in certifying and patenting the swamp lands to the states. Problems of title resulted from interim attempts by the states to convey the land prior to securing a federal patent. In Gaston v. Stott,[4] decided in 1873, the Oregon Supreme Court interpreted the 1850 Act as a grant in praesenti, vesting in the states as of the date of its passage the fee simple title to all of the swamp and overflowed lands within their borders. The proviso in the 1860 Act was said by the court to be "repugnant to the purview of the act" because "We cannot bring ourselves to believe that Congress intended to take away any part of the particular lands granted by the body of the act, by the subsequent general words quoted."[5] The court held that even though the state's title had not been confirmed by the Secretary of the Interior and no patent to the state had been issued, the state owned and could validly convey any land within its borders which was in fact of the swamp and overflowed character described by the federal act. Title was therefore quieted in the state's grantee as against a claimant under the federal pre-emption laws.

A similar state of facts led to a similar result in Miller v. Tobin,[6] decided in 1887. Under the theory employed in these cases, whether the land was in fact swamp land within the meaning of the federal legislation was an issue of fact for trial.

Later decisions of the United States Supreme Court,[7] however, established that legal title to the swamp lands granted by the federal acts remained in the federal government until they were patented to the states. Because certification of the land as swamp land by the Secretary of the Interior was necessary prior to patent, the factual question of the nature of the land was to be decided by him.[8]

Following the reasoning of these cases, the Oregon court held in Small v. Lutz[9] that the Secretary's decision that the land in question was open to homestead (and thus not swamp land) "cannot be impeached or questioned except in a court of equity, for fraud or mistake other than an error of judgment."[10] To the same effect is Morrow v. Warner Valley Stock Co.[11] in which the finding of the Secretary that the land in question was swamp land within the meaning of the federal acts was said to be final and conclusive in the absence of fraud or mistake.[12]

The Morrow case also deals at length with the effect of the proviso in the Act of 1860, treating Gaston v. Scott and Miller v. Tobin as having been impliedly overruled by the later decisions of the United States Supreme Court. It was the opinion of the Oregon Supreme Court at this time that the proviso should be regarded as

> . . . a limitation, restriction, or condition upon the grant of 1850, the effect of which is to reserve to the general government, not only the legal title of all such lands until confirmation of title, as provided in the act of September, 1850, but also the right in the future, and prior to the confirmation of title, to reserve, sell or dispose of any of such lands under any law enacted prior to March 12, 1860. The state, therefore, was not entitled to all land that was in fact swamp and overflowed at the date of the act, but only that part of such lands that had not been reserved, sold, or disposed of by the government of the United States prior to confirmation of title. Hence, prior to the selection and approval by the Secretary of the Interior, the government of the United States was under no obligation to refrain

> from reserving, selling, or disposing of such lands, or to reserve from settlement, under the general laws, any of the land which the state might claim to be swamp, so that it might be preserved for the state, and the title thereto be confirmed to it in the future. Nor could the state by any contract with third parties, prior to any survey or selection and identification of the lands by the Secretary of the Interior, after survey, interfere with the proper and orderly execution by the department of other land laws, or interfere with the acts of intending settlers thereunder, for the land was subject to settlement and entry at any time before certification thereof by the Secretary of the Interior to be swamp land.[13]

State Administration

In 1870 Oregon passed a law which allowed private persons to purchase the swamp land granted under the federal legislation with a twenty percent down payment followed by proof of reclamation of the land and payment of the balance within ten years.[14] In 1878 this legislation was repealed.[15] Then in 1887 a statute was enacted declaring void all certificates of sale on which the twenty percent down payment had not been paid as of January 17, 1879,[16] (the effective date of the 1878 repeal).

This legislation was before the United States Supreme Court in Pennoyer v. McConnaughy.[17] In that case an application to purchase swamp land had been made and accepted by the state prior to passage of the 1878 repealing act, but the down payments were not made until 1881 and 1884. The applicant was at no time in default under the terms of the 1870 legislation, his down payments having been made within 90 days after the public notice which the act required. Because the down payments had not been made prior to January 17, 1879, the state canceled the certificates of sale and proceeded to sell the lands to other parties.

The Court held that the 1878 act did not operate to nullify pending applications which were in good standing on its effective date, and that the 1887 act, so far as it did so operate, was in violation of Art. I sec. 10 of the United States Constitution.[18]

The Oregon Supreme Court later considered a case[19] in which application to purchase swamp lands was made and down payment paid in 1876. The state, by

oversight, sold the same property to another party in 1891. The original purchaser had not, at that date, paid the remaining eighty percent of the purchase price or made proof of reclamation, both of which were required within ten years after the down payment under terms of the 1870 legislation. The court held that by failing to comply with the terms of the 1870 legislation, the original purchaser had forfeited his rights under his contract, and that the act of 1887 validly operated to cause a reversion of the land to the state. The second sale was therefore proper.[20]

At present, the state's swamp lands are administered under the general public land laws of the state. Individuals may make application to purchase up to 640 acres of swamp lands,[21] and may arrange for deferred payments.[22] A certificate of sale is issued when one fifth of the purchase price has been paid,[23] and the balance of the price must be paid within five years from the date of the certificate.[24] If the appraised value of the land exceeds $1,000, it may not be sold to a private person except after calling for bids.[25] The Division of State Lands has the authority to enter contracts for the drainage and reclamation of swamp lands which are still in state ownership.[26]

1. Act Sept. 28, 1850, ch. 84; 9 Stat. at Large 519.
2. Id.
3. Act Mar. 12, 1860, ch. 5; 12 Stat. at Large 3.
4. 5 Or. 48 (1873).
5. Id. at 61.
6. 16 Or. 540 (1887).
7. Michigan Land and Lumber Co. v. Rust, 168 U.S. 589, 18 S.Ct. 208, 42 L.Ed. 591 (1897); Brown v. Hitchcock, 173 U.S. 473, 19 S.Ct. 485, 43 L.Ed. 772 (1899).
8. Michigan Land and Lumber Co. v. Rentz, 168 U.S. 589, 591, 18 S.Ct. 208, 42 L.Ed. 591 (1897).
9. 41 Or. 570, 67 P. 421, 69 P. 825 (1902).
10. Id. at 578.
11. 56 Or. 312, 101 P. 171 (1910).
12. Id. at 322.
13. Id. at 332-33.
14. General Laws of Oregon, 1843-72, Deady and Lane, p. 642, Ch. 29, Title IV; Laws, 1870, p. 54.
15. Laws 1878, p. 54, sec. 34.
16. Laws 1887, p. 9.
17. 140 U.S. 1, 11 S.C. 699, 35 L.Ed. 363 (1891).
18. Id. at 24-25.
19. Husbands v. Mosier, 26 Or. 55, 37 P. 80 (1894).
20. Id. at 64-65.
21. ORS 273.271(1) (1967). The acreage limitations do not apply to municipal corporations purchasing lands for public use. Id., subsec. (2).
22. ORS 273.281 (1967).
23. ORS 273.285(1) (1967).
24. ORS 273.281 (1967).
25. ORS 273.201 (1967).
26. ORS 273.511 (1967); ORS 274.280=274.310 (1967).

V RECENT DEVELOPMENTS

The area of the law covered by this "Water Lands and Boundaries" material does make for rather dry reading but it is of considerable practical importance. In Oregon, an interim legislative study committee, called the Advisory Committee to the State Land Board,[1] has struggled between the two most recent legislative sessions to recommend solutions and draft bills in regard to navigability, boundary problems, fills in water courses, state control and proprietary interests in water related lands and other related problems. A number of the bills to come out of this committee are pending in the Oregon Legislative Session at this writing (spring, 1973). Some may be enacted. Any student of this area of the law in Oregon must bring his research up to date by investigation of recent legislation.

The Oregon Attorney General has issued several recent opinions of great importance in this area of the law. Several have been in response to questions submitted by the Advisory Committee to the State Land Board. One such question arose out of testimony before the Committee by the principal investigator on this project[2] to the effect that an earlier Attorney General's opinion[3] was wrong when it stated that the state could not require a riparian to submit to a lease for his use of structures on state owned submerged and submersible lands. The Advisory Committee then asked the Attorney General for a clarifying opinion. The result was an exhaustive 90 page opinion[4] of excellent scholarly qualities which reviewed the law in this area and overturned the earlier opinion. The opinion stated:

(1) The state has legislative power to require an upland owner on a navigable river to execute a rental lease for building new structures or continuing to maintain existing structures on the states submerged and submersible lands. Exceptions relate to temporary log booms and existing wharves in compliance with ORS 780.040-.050.

(2) Existing law authorizes the Division of State Lands to require such rental leases for structures other than wharves (except for temporary log booms).

(3) Existing law in conjunction with Art. VIII, Sections 2 and 5 of the Oregon Constitution apparently and arguably authorizes the Division of State Lands to require rental lease for wharves.

The opinion concerns both tidal and non-tidal lands, the state's proprietary interests in submerged and submersible lands, the relationship between state interests and riparian rights of access, wharfing out, log moorage, etc., the relationship between certain state control and port authority control, and the authority of the state through the Division of State Lands to issue rental leases for wharves and other structures in water related lands. This lengthy opinion thus stands at the present time as the most comprehensive statement of the law pertaining to state interests in water related lands.

A second recent opinion[5] of major importance was submitted by the Attorney General in response to questions from the Advisory Committee in regard to public rights in tidelands and the effect on these rights of the "filled land law" in ORS 274.905 to 274.940 and ch. 754 (1971) Ore. Laws 2103. This 50 page opinion discusses the status of the public trust doctrine in Oregon and its applicability to tidelands whose private owners are constrained in their legal capacity to fill such tidelands by various provisions of statutory law. The opinion and the statute and case law which it discusses afford ample evidence of the growing trend of the law, in Oregon as elsewhere, to recognize the public interest in the environmental protection of natural resources such as tidelands.

Another recent opinion[6] details state authority under anti-pollution and other laws to prevent or control the removal by dredging of an island, apparently privately owned, located in a navigable river in Oregon.

In response to another question submitted by the Advisory Committee, the Attorney General[7] analyzed the effect upon state ownership of beds of those

waterways recently declared by the Corps of Engineers to be navigable waters of the United States for regulatory or environmental protection purposes. Such administrative determinations carry weight but are not conclusive on the question of state ownership.

The Attorney General did not believe that members of the public have a right to use boats on an artificial, privately owned lake filled by water under a permit to the owner from the State Engineer.

1. This Committee was created by HJR 40, Ore. Laws 1991 (1969) and continued in existence by SJR 4, 2 Ore. Laws 2259 (1971).

2. Professor Chapin D. Clark testified before the Advisory Committee in the spring of 1972 in Salem, Oregon.

3. 34 Ore. Ops. Att'y Gen. 370 (1968).

4. 36 Ore. Ops. Att'y Gen. 150 (Oct. 30, 1972).

5. 35 Ore. Ops. Att'y Gen. 844 (1971).

6. 36 Ore. Ops. Att'y Gen. 285 (Dec. 15, 1972).

7. 36 Ore. Ops. Att'y Gen. 61 (Aug. 21, 1972).

8. 35 Ore. Ops. Att'y Gen. 1202 (May 17, 1972).

LIABILITY FOR ESCAPING WATER

When water escapes from an artificial retention or diversion system to the injury of another there are four possible bases of liability: 1) strict liability, 2) trespass, 3) negligence, and 4) nuisance.

I. STRICT LIABILITY[1]

Over a century ago in Lancashire, England, some mill owners had a reservoir constructed. Nearby, coal mines were being worked. Unknown to the mill owners, several abandoned, filled shafts from ancient workings connected the reservoir with the adjacent mines. When the reservoir was filled with water one of the old shafts gave way, causing the mining operation to be flooded. It was specifically found that there was no fault on the part of the mill owners. On appeal in the Exchequer Chamber, Justice Blackburn stated the rule to be "that the person who for his own purposes brings on his land and collects and keeps there anything likely to do mischief if it escapes, must keep it in at his peril, and if he does not do so, is prima facie answerable for all the damage which is the natural consequence of its escape."[2]

Two years later this decision was affirmed by the House of Lords, but Lord Cairns' opinion placed a restriction on the general rule -- that liability ensued only if the activity was a "non-natural" use of the land.[3]

A. Oregon Case Law

In Esson v. Wattier[4] the Oregon Supreme Court endorsed Justice Blackburn's version of the rule, apparently without any awareness of the qualification introduced by Lord Cairns. Justice Moore concluded that "[I]f a person, by artificial means, raises a volume of water above its natural level, and by percolation, or by overflow, injures neighboring lands without license, prescription, or grant from the proprietor, the latter may invoke the interposition of a court of equity, and obtain an injunction to prevent it, when he would sustain irreparable injury, or be compelled to bring a multiplicity of actions to recover the damages as they accrued."

Though the decree in the Esson case favored defendant, because of the plaintiff's failure to prove causation,[6] the Blackburn version of Rylands v. Fletcher had become a part of Oregon law. Persons raising water above its natural level and causing injury as a result either by percolation or overflow[7] were to be held liable irrespective of negligence. This position was endorsed in Mallett v. Taylor,[8] but again the holding was dictum since there was clear evidence of negligence.[9]

In Patterson v. Horsefly Irrigation District,[10] the court suddenly abandoned its endorsement of Rylands v. Fletcher and held erroneous a jury instruction that "where a person by artificial means caused water to percolate through the soil to the injury of his neighbor [he] does so at his peril and is legally responsible therefore irrespective of negligence."[11] The instruction was taken word for word from the Mallet [12] decision, but the court held that that decision rested on the negligence of the defendant, and that Taylor v. Farmers Irrigation Co.[13] had established that negligence was an "essential element to be proved in order to recover damages due to seepage and leakage."[14] No mention was made of the Esson case.[15]

This interpretation of Taylor v. Farmers' Irr. Co. was questionable, although relying on it as authority for the reversal may have been valid. The Taylor decision rested on three points: 1) damages, if any, were speculative,[16] 2) a statute provided that irrigation companies were to be liable for damage resulting from negligent construction or maintenance of ditches,[17] and 3) the Act of God exception to the Rylands v. Fletcher rule which was noted in Mallet v. Taylor.[18] The third point was substantiated by the following passage which was quoted from the Mallet decision:

> "That cases must often arise where by accident, such as sudden floods, or unusual rains or other accidents, damage may occur to adjoining fields which could not reasonably have been foreseen, and for which no action will lie, seems to be established by the later authorities."[19]

Had the quote continued it would have read as follows:

> ". . . but to hold that a man may lawfully construct a ditch which from the manner of its construction must necessarily occasion substantial injury to the land of his neighbor either by overflow or by percolation, or that he can lawfully so irrigate his land as to do such substantial injury, would be to grant him an easement in such adjacent land without compensation and this the law will not permit."[20]

While there was reason to mention the Act of God exception in Taylor (gophers had dug holes in the wall of the canal on occasion[21]), no such reason appeared in the Patterson case.

Of course the valid comparison in Patterson was that it too involved an irrigation company and there was at least an issue as to whether the statutory language (see note 17) excluded irrigation companies from the Rylands v. Fletcher rule.[21a]

In Kaylor v. Recla[22] the defendant irrigator had failed to provide for drainage from his irrigated land when he could do so at little expense. By adding to the Mallet and Esson rule the additional qualification that one was liable "when the same [i.e., damage from seepage or overflow] can be prevented by reasonable and not too expensive means, . . ." the court was able to accommodate both the Mallet and Patterson decisions.[23]

In Suko v. Northwestern Ice Co.[24] a cold storage company was sued for damages for personal injury caused by the bursting of its water tanks. It seemed an ideal time to reaffirm the Rylands v. Fletcher rule, but instead the court relied on res ipsa loquitur and the jury finding of negligence.[25] A jury charge that the defendant was "not an insurer against an accident such as happened in this case" was tacitly approved, though such approval did not, of course, affect the result.[26]

Despite the Patterson and Suko decisions, in Ure v. United States[27] the U.S. District Court for Oregon held the United States, which was operating and maintaining an irrigation canal, absolutely liable for damage resulting from water flowing through a break in the canal.

While acknowledging that the Oregon Supreme Court had never squarely applied the doctrine of Rylands v. Fletcher, the district court pointed out that the opinions had been so emphatic in approving the doctrine that Oregon was usually noted in legal articles as one of the states accepting the doctrine.

In a review of the cases, Judge Fee first established the strong commitment to the doctrine made by the Oregon Supreme Court in Esson[29] and Mallet.[30] He then dismissed the Patterson[31] decision on the ground that the author of it also wrote the Suko[32] opinion which cited Esson, Mallet and Rylands v. Fletcher.

Judge Fee then distinguished these decisions on the ground that they generally involved percolation of water, whereas the instant case involved a major breach in the canal wall.[33] He also noted that good practice leads lawyers to plead negligence as well as absolute liability;[33a] and it was probably because of this practice that no holding squarely on the basis of Rylands v. Fletcher had appeared.[34]

Judge Fee thought Suko most like the instant case and noted what a drastic negligence rule had been invoked in that case. He emphasized the extract from Kinney,[35] there cited, to the effect that water artificially restrained is a most dangerous instrumentality requiring all precautions which skilled human foresight can determine.[36] And he noted that Rylands v. Fletcher and the Oregon cases supporting it were cited by the Suko court.[37]

Although Judge Fee was stretching the Patterson and Suko decisions, his opinion was subsequently fully endorsed by the Oregon Supreme Court. In Brown v. Gessler[38] Justice Tooze declared that a review of the Oregon cases would clearly establish that the Blackburn version of the Ryland v. Fletcher rule had been adopted in Oregon. Such review was said unnecessary because the cases had been "thoroughly discussed and correctly analyzed in an exceptionally able opinion recently written by the Honorable James Alger Fee, . . ."[39]

The Brown case was, however, declared an exception to the rule. The case arose when excavations were made with intent to erect a theatre. Rain water collected

in the excavation and from there seeped into the basement of plaintiffs' adjoining building. Citing Blackburn's language in laying down the Rylands v. Fletcher rule the court emphasized the words, "for his own purposes."[40]

Finding the excavation in the instant case was not for purposes of catching water, but indeed the water was most unwanted, the Oregon Supreme Court concluded there was no liability. "[D]efendants were engaged in a lawful and reasonable use of their property."[41] The Court, however, went on to affirm the jury verdict for plaintiffs on the grounds of negligence.

In a more recent U.S. District court case, Judge Kilkenny citing Esson, Mallet, Judge Fee's opinion in Ure, and Brown, held that an irrigation district whose canal caused seepage which damaged the trackbed of an adjacent railroad was strictly liable under the Rylands v. Fletcher test as applied in Oregon.[42]

B. Potential of Application of the Natural Use Concept - A Re-examination.

Review of the Oregon cases in the light of the true Rylands v. Fletcher rule would be helpful. Lord Cairns added the qualification to Blackburn's opinion on this rule that there was liability only if the use of the land was "non-natural."[43]

At first there was confusion as to the meaning of "non-natural", but subsequent decisions have made it clear that "non-natural" meant "unusual", "abnormal", "extraordinary" or "inappropriate".[44] This is the rule which is being endorsed either expressly or inadvertently by a majority of jurisdictions in the U.S. today.[45] It is probably its deviation from the rule which has most troubled the Oregon Supreme Court. Ignoring the federal decision temporarily, the following Oregon decisions should be reviewed: Esson v. Wattier,[46] Mallet v. Taylor,[47] Patterson v. Horsefly Irrigation District,[48] Taylor v. Farmers' Irrigation Co.,[49] Suko v. Northwestern Ice Co.[50] and Brown v. Gessler.[51]

In Esson, the plaintiff was seeking to enjoin construction of a dam for operation of a gristmill. Plaintiff failed only because he could not prove any injury to himself. It was declared that Rylands v. Fletcher would apply if any injury caused

by the activity could be shown. In Mallet it was said one who introduced irrigation water onto his land would be strictly liable for resultant damage. (Negligence, however, was the actual basis of liability.) These two cases suggest the unqualified application of Blackburn's version of the rule. At this point the Oregon court clearly saw no reason to consider the nature of the water use. Had they done so, certainly the activity in Mallet and possibly the activity in Esson would have been regarded as natural uses.

Patterson and Taylor were the first cases to reveal any tendency by the court to shy away from the rule. Both of these cases involved seepage from irrigation ditches which allegedly caused injury to adjoining land. The plaintiff's case in Taylor failed primarily because he failed to show substantial injury. In Patterson, however, the injury was clear as was the total absence of any negligence on the part of the United States. Thus, the basis for liability would have to be liability without fault. The key issue before the court was whether it was error to instruct the jury that the U.S. was liable irrespective of negligence. Was an irrigation district an insurer against any damage caused to land adjacent to the district's ditches by seepage or underground percolation of water? Confronted by a massive brief by defendant and two amici curiae briefs to the effect that irrigation ditch owners were bound to exercise only ordinary care in the construction and maintenance of their ditches,[52] the court held the instruction error.

No mention was made of Lord Cairn's qualification to the Blackburn version of the rule, but it is clear, that an adoption of his qualification at this point would have saved the court considerable pain and perhaps better guided subsequent decisions. The Oregon Supreme Court was confronted with the dilemma of choosing between the rule they had adopted and its policy favoring irrigation of land. By classifying irrigation as a natural use of land in an arid area, the dilemma could have been eliminated.

Appellants had strongly urged the court to distinguish damage caused by leaking

ditches and canals from similar damage caused by dams and reservoirs, insisting the Rylands v. Fletcher rule applied only to the latter.[53] The court cited language recognizing the distinction,[54] but failed to endorse such a dichotomy.[54a]

Failure to do so, made precedent more difficult to handle in the Suko case. That case involved an overhead reservoir. Most of the authority cited by appellants in Patterson was not controlling. Yet the same trial judge who decided Patterson apparently felt compelled not to invoke Rylands v. Fletcher; and instead found liability on the basis of res ipsa loquitur and a high duty of care. The natural-use test would have made the issue much clearer.

In Brown the Oregon Supreme Court again stated that Blackburn's statement of the Rylands v. Fletcher rule was law in Oregon, endorsing Judge Fee's opinion a year earlier.[54b] Then, the Court distinguished away the facts before it by finding the defendants had not brought the water on the land "for his own purposes." Much emphasis was placed on the fact that the excavating for a building was a most normal procedure in the locality, and defendants had followed standard construction practices in carrying out their work. (Defendants were, however, found liable on grounds of negligence.) The court again tacitly expressed a desire not to impose strict liability where the use of the land was not "unusual" or "abnormal". The Court expressly relied on the distinction of the defendants' purpose in excavating, but could not refrain from pointing out that such excavation was a "lawful and reasonable construction."[55]

Clearly the natural use distinction again would have sufficed. Thus, we see that when confronted with a case of natural use of land, the Oregon court has found some reason to abandon the Blackburn version of the Rylands v. Fletcher rule.

Against this trend are the two U.S. District Court opinions, Ure v. United States[56] and Union Pacific Railroad Co. v. Vale Irrigation District.[57] Both of these cases applied Blackburn's version of the rule as the law of Oregon in

situations in which the defendant's activity (irrigation) clearly was a "natural use" of land in the locality. These decisions have taken the Oregon Supreme Court at its word and declared Oregon to follow the Blackburn version of the rule. The Oregon Supreme Court in Brown endorsed the Ure opinion. At the same time, it distinguished the facts before it and did not apply the strict liability rule.

Conclusion.

Will the Oregon Supreme Court adhere to its endorsement of Ure when it is itself faced with an irrigation case, or will it rely on the Patterson decision?[58] Application of Lord Cairn's qualification, and the trend in other jurisdictions favoring this version of the rule would seem to indicate that Oregon will in the future follow Lord Cairn's rule; either by expressly recognizing the "natural-use" distinction, or by continuing to distinguish away the "natural-use" cases as it has in the past. This approach would align Oregon with the other western states which generally hold that ditch owners are not strictly liable.[58a]

It is possible, however, that the trend in the law of torts in general to favor more extended application of strict liability principle, will eventually overtake the trend favoring the "natural-use" exception, leaving the Blackburn version of the rule dominant in Oregon law.

1. The Rylands v. Fletcher rule discussed below is not limited to damages accruing from use of water.

2. Fletcher v. Rylands, L.R. 1 Ex. 265 (1866).

3. Rylands v. Fletcher, L.R. 3 H.L. 330 (1868). Lord Cairns' qualification has largely been ignored by the American courts and as a consequence the Rylands v. Fletcher rule has been severely mistreated. Lord Cairns' qualification is followed in England today. The American decisions generally reach a similar result by invoking the more limited concept of ultra-hazardous activity. See Prosser, "The Principle of Rylands v. Fletcher," Selected Topics on the Law of Torts (1953), p. 135. Rstmt, Torts § 519.

4. 25 Or. 7, 34 P. 756 (1893).

5. Id. at 12.

6. Id. at 12-13.

7. The proposition that there is no legal distinction between damage caused by percolating waters and that caused by overflow was sustained in Mallet v. Taylor, 78 Or. 208, 152 P. 873 (1915). However, subsequent case law might raise doubts. Efforts have been made to distinguish the cases on this basis. For example, see Judge Fee's opinion in Ure v. United States, 93 F. Supp. 779 (D.C. Or. 1950).

8. 78 Or. 208, 152 P. 873 (1915).

9. Id. at 212.

10. 157 Or. 1, 69 P.2d 282, 70 P.2d 33 (1937).

11. Id. at 20, 23.

12. Supra Note 8.

13. 82 Or. 701, 162 P. 973 (1917).

14. Patterson, supra, note 10 at 23.

15. 1 Willamette L. J. 344, 349.

16. Supra, note 13 at 703.

17. "Every corporation constructing a ditch or canal, flume or reservoir, under the provisions of this act shall be liable for all damages done to the persons or property of others, arising from leakage or overflow of water therefrom growing out of want of strength in the banks or walls, or negligence or want of ca in the management of said ditch or canal, flume or reservoir; provided, that damage resulting from extraordinary and unforseen action of the elements, or attributable in whole or in part to the wrongful interference of another with said ditch or canal, flume, or reservoir, which may not be known to said corporation for such length of time as would enable it by the exercise of reasonable efforts to remedy the same, shall not be recovered against said corporation." Laws of Oregon, 1891, page 57, § 16, O.C.L.A., §§ 116-408.

18. Supra, note 8.

19. Taylor v. Farmers' Irr. Co., 82 Or. 701, 705 (1917).

20. Mallet v. Taylor, 78 Or. 208, 213-14, 152 P. 873 (1915).

21. Taylor v. Farmer's, supra note 13 at 704.

21a. In Canada, which also has irrigation district enabling legislation, it has been suggested that such districts would not be liable under Rylands v. Fletcher unless the enabling legislation called for strict liability. The reasoning is that it would be unreasonable to impose strict liability on public bodies acting in the public interest. Irrigation units organized for profit would however be liable. See 5 Cam. Bar J. 250.

22. 160 Or. 254, 84 P.2d 495 (1938).

23. Id. at 259. The Court also said it was negligence not to take such precautions against injury to neighboring land.

24. 166 Or. 557, 113 P.2d 209 (1941).

25. Ibid.

26. Id. at 570.

27. 93 F. Supp. 779 (D.C. Or. 1950).

28. Id. at 789.

29. Supra, n. 4.

30. Supra, n. 8.

31. Supra, n. 10.

32. Supra, n. 24.

33. Supra, n. 27 at p. 790.

33a. Where negligence is provable, the plaintiff is better off to avoid an absolute liability instruction entirely. The latter instruction might be grounds for reversal on appeal.

34. Supra, n. 27 at p. 790

35. Kinney on Irrigation and Water Rights, 2d Ed., § 1669, p. 3069.

36. Ure v. U.S., supra note 27 at 791.

37. Judge Fee's opinion finding the United States liable was subsequently overturned in United States v. Ure, 225 F.2d 779 on the ground that strict liability could not be invoked under the Federal Torts Claims Act, since the act may be invoked only for negligent or wrongful omissions of government employees. This rule places the United States back under the cloak of sovereign immunity.

38. 191 Or. 503, 230 P.2d 541 (1951).

39. Id. at 512-13.

40. See full quote, supra note 2.

41. Id. at 513.

42. Union Pacific Railroad Co. v. Vale Irrigation Dist., 253 F. Supp. 251 (D.C. Or. 1966). The decision, however, was also upheld on the bases of trespass and negligence.

43. Supra, note 3.

44. Prosser, supra note 3 at 141-42.

45. Id., at p. 142. This inadvertent endorsement is taking place in large scale by use of the narrow Restatement of Torts version of that test. (I.e., the ultra-hazardous activities test.)

46. 25 Or. 7, 34 P. 756 (1893).

47. 78 Or. 208, 152 P. 873 (1915).

48. 157 Or. 1, 69 P.2d 282, 70 P.2d 33 (1937).

49. 82 Or. 701, 162 P. 973 (1917).

50. 166 Or. 557, 113 P.2d 209 (1941).

51. 191 Or. 503, 230 P.2d 541 (1951).

52. See Appellants Opening Brief, pp. 56-77; Appellants' Reply Brief, pp. 18-26; and Brief of Amici Curiae (Bur. of Reclamation), pp. 17-46. In Appellants' Opening Brief, 3 Kinney on Irrigation 3079, § 1672; 15 R.C.L. 488; and 1 Wiel, Water Rights in the Western States (3rd Edition) 489 were all cited and quoted directly. Each clearly stated the owners and operators of ditches were not liable as insurers for damages from seepage.

    In their reply brief appellants cited cases which supported this textual authority allegedly from every arid state which had passed on this question. Cases from Arizona, Colorado, Idaho, Montana, Nebraska, Oregon (Taylor v. Farmers' Irr. Co.), Utah, Washington and Wyoming were cited.

    The Amici Curiae brief of the U.S. Bureau of Reclamations traced the Oregon cases showing they were not bar to a holding of error.

    Respondent could cite only the authority of California and the prior Oregon cases discussed.

53. See Appellant's opening brief, pp. 66-77.

54. Patterson, supra note 48 at 22.

54a. The Patterson and Taylor decisions have also been distinguished on the ground that they involved cases in which the plaintiff or his predecessor in interest

had sold the right of way for the ditch or canal and had presumably included in the sale price compensation for the possibility of non-negligent injuries to his land. See Judge Kilkenny's opinion in Union Pacific RR Co. v. Vale Irrigation District, 253 F. Supp. 251, 259 (D.C. Or. 1966).

54b. This affirmation is reiterated in Bedell v. Goulter, 199 Or. 344, 261 P.2d 842 (1953), a blasting case.

55. Brown, supra, note 51 at 513.

56. 93 F. Supp. 779 (D.C. Or. 1950).

57. 253 F. Supp. 251 (D.C. Or. 1966).

58. The District Court decisions would be easy to ignore. Ure was overturned on other grounds by the Court of Appeals for the 9th Circuit. United States v. Ure, 225 F.2d 709 (C.A. 9th Circuit, 1955). The recent Union Pacific case based liability also on trespass and on negligence, and thus its holding on strict liability could be regarded as dicta.

58a. 169 A.L.R. 517, 521 and 523; 30 Am. Jur. § 86, p. 910.

II TRESPASS

Closely related to the doctrine of strict liability is the theory of trespass. Where one, either personally or by agency of some force which he voluntarily initiates, enters the land of another, liability accrues "even though the act may be done accidentally, or in good faith or under justifiable error."[1]

A. Common Law

At common law, if a party without negligence dammed a stream upon his own property, and his act resulted in the stream going directly upon the land of another, he was liable for the consequences.[2] The directness of the invasion was critical. If a defendant "threw water on property it was trespass, but if he merely constructed a spout, or obstructed or diverted a stream so that as a result the water ultimately flowed onto the premises of the plaintiff, the action was on the case."[3] Case required proof of negligence or intent as well as a showing of actual injury. Trespass did not.[4]

It was the requirement of direct invasion which prevented the Rylands v. Fletcher courts from invoking the theory of trespass. The flooding of the mine having taken place consequentially, trespass was not applicable.

B. Restatement

The Restatement of Torts imposes liability for trespass only in case of (1) intentional intrusion, or (2) negligence or (3) acts done in the course of an extra-hazardous activity. Intentional entry creates liability even if no damage ensued, but one entering recklessly, negligently or as a result of an extra-hazardous activity is liable only if harm results.[5]

The Restatement has also abandoned the distinction between direct and indirect invasions, classing any reasonably direct tangible entry as trespass.[6] By classifying such entries as trespass, it would seem that the Restatement has brought the Rylands v. Fletcher case within the law of trespass, and that liability

could be imposed on that theory provided that impounding water could be classified as an "ultra-hazardous activity." The Restatement definition of "ultra-hazardous activity" is an activity which involves extreme danger which the utmost care cannot eliminate and which is not a matter of common usage,[7] but Prosser has suggested that in view of the case law this restriction is definitely too narrow and that the courts are very much prone to consider the potential for harm in the surrounding where the activity takes place.[8]

C. Federal Decisions Arising in Oregon

While the Supreme Court of Oregon has not spoken explicitly on the liability in trespass of a defendant who inadvertently causes water to go on the land of another, the U.S. District Court for the District of Oregon has been quite express. In a recent case Judge Kilkenny declared, "[t]hat the act of placing water on the lands of another, as a result of an act voluntarily done, constitutes trespass is well settled by Oregon law."[9] Judge Kilkenny was undoubtedly relying on the earlier statement to the same effect by Judge Fee.[10]

Judge Fee distinguished the Rylands v. Fletcher rule from liability based on trespass.

> "When one voluntarily and deliberately does an act upon his own land which results in physical trespass upon lands in other ownership, the liability is absolute. In the stored water cases, a condition has been created, the consequence of which may be injury to other land. But in the active release and management of a column of water flowing at a fast rate and in great volume, . . . , the person who initiates and carries on the activity is a participant in whatever results. If the result is a trespass on lands of another, the liability is absolute."[11]

Both the Fee and Kilkenny opinions involved cases in which irrigation canal water under the control of defendant caused injury to adjacent land because of a failure in the walls of the canal. It would seem the distinction made by Judge Fee and endorsed by Judge Kilkenny between the water storage cases and the canal cases lacks merit. In Rylands v. Fletcher the defendants filled their reservoir with water and a subsequent failure caused injury. So too, in the irrigation canal

cases, water is voluntarily introduced to the system and subsequent failure yields harm. It would appear that the common law would regard the two factual patterns as basically the same in terms of liability.

Furthermore, the Oregon case law cited as supporting the conclusion deals only with intentional trespass. In Laurence et al. v. Tucker[12] the defendant was emptying sewage into a drain which ran across plaintiff's land. The Court said, ". . . in the absence of a grant, no person has the right to dump the overflow from a septic tank, or the waste water from his house, upon the premises of an adjoining landowner, . . ."[13] Clearly the case involved an intentional trespass for which it is commonly acknowledged no fault or injury need be shown.

Boulevard Drainage System v. Gordon[14] also involved the intentional dumping of water onto the property of another. In Stephens v. City of Eugene,[15] the plaintiff complained because the city's power dam caused water to flow at an increased rate through a slough dividing plaintiff's land, thus preventing him from fording the stream as he had previously done. In holding the City guilty of a continued trespass because of the intentionally increased flow, the Court specifically distinguished cases in which water inadvertently escaped from one's own ditch or canal onto the land of another.[16]

Finally, Judge Fee cited Cartwright v. Southern Pac. Co.[17] Judge Bean said in that case:

> "There are authorities holding that the remedy for overflowing the lands of another where the obstruction causing the overflow is not on plaintiff's land, and there was no physical entry thereon, is an action on the case and not in trespass (Hicks v. Drew, 117 Cal. 305, 45 Pac. 189); but it seems to me that, where the direct result of the obstruction is to wash away the soil of another and thereby destroy the freehold, it amounts in effect to the taking of property and is a "trespass" within the meaning of the statute of limitations, whether the obstruction is upon plaintiff's land or not, and as a consequence the present suit is not barred." (emphasis added)[18]

This was really a holding that the Statute of Limitations prescribed for trespass was intended to apply to such fact situations,[19] and not a conclusion that trespass

in Oregon included indirectly as well as directly caused injuries. In any event, Cartwright was a federal decision and as such is not determinative of Oregon law. Furthermore, the defendant in Cartwright, like the city in Stephens v. Eugene was intentionally causing increased flow to run against the plaintiff's land.

D. Oregon Supreme Court Decisions

In the absence of any water cases in which the Oregon Supreme Court has clearly proclaimed its position on trespass liability, the problem is to determine whether the court would find a defendant liable in trespass for inadvertently spilling water on adjacent land, when the water was voluntarily set in motion by the defendant. Liability in trespass could be achieved in two ways: (1) by finding that such inadvertent injuries were directly caused or (2) by using the Restatement approach which as previously mentioned, abolished the distinction between direct and indirect actions.[20]

The first course was taken by the Court in Martin v. Reynolds Metals Co.[21] That case involved the escape of poisonous fluoride particles into the air from defendant's industrial works, which particles eventually settled on plaintiff's farm, causing injury. Justice O'Connell declared that the invasion of chemicals on the land of the plaintiff was direct and that only the resultant injury was consequential.[22] This same approach was subsequently taken in Loe v. Lenhardt,[23] a case involving serial spraying of crops. How conclusive are these opinions for the water cases? The Martin case involves the introduction of particles into the air with the knowledge that they must come down somewhere -- probably on land other than the company's, and with the knowledge that they would probably cause injury. In Loe the actor was apparently more hopeful that all harmful substances would deposit on his own lands. The first case would be analogous to diverting water into a natural depression knowing it must flow somewhere, but not bothering to determine where. The second case would be analogous to dumping water onto one's own land in hope it would not run off onto the lands of another, but with a high

probability that it would. Both situations involved a strong possibility of injury to others. They would be classified as negligent acts except that the actors took all the precautions reasonably possible. In Martin liability was predicated on intentional trespass and in Loe it was based on a determination that crop dusting with the chemical used by defendants was an ultra-hazardous activity.

It is difficult to imagine comparable water cases in which negligence would not be a grounds for decision. Indeed, in the Union Pacific case, Judge Kilkenny concluded that seepage from the canal was so likely that it was negligence to attempt to pass water through it.[24] Still he chose to invoke trespass as an alternate ground.

The elevated water storage cases such as Suko probably are the best example of water cases in which the trespass might be invoked. But that situation, like Loe, might be termed an ultra-hazardous activity.

In the Martin case, Justice O'Connell expressly refrained from deciding whether Oregon had adopted the Restatement position abolishing the distinction between direct and indirect entry. He felt that since the case involved direct entry, there was no need for such inquiry.

E. Conclusion

Oregon clearly imposes liability on a theory of trespass for intentional invasions of property. Likewise, it has found liability where harm occurred as the result of an ultra-hazardous activity. But within the sphere of reasonably safe activities such as irrigation in rural areas, there is no clear indication that the Oregon Supreme Court would invoke trespass despite the federal district court's propensity to do so. The comparable case of Martin v. Reynolds indicates the Oregon court might use a theory of trespass if pressed to do so.

It would appear that the federal district court, which holds that Oregon follows the Rylands v. Fletcher rule expressed by Blackburn, can always impose liability

where this rule is applicable on the alternate grounds of trespass. In contrast, the Oregon Supreme Court which has indicated some reluctance to apply Blackburn's rule to the irrigation cases, has also refused to expressly extend trespass law to include indirect entries.

1. Union Pacific Railroad Co. v. Vale Irrigation District, 253 F.Supp. 251, 258 (D.C. Ore. 1966).

2. Prosser, Law of Torts, 1955, p. 55.

3. Prosser, Law of Torts, 1955, p. 56.

4. Ibid.

5. Restatement, Torts § 158 (1934); Restatement, Torts § 165 (1934); Restatement, Torts, § 822 (1939). See also 61 Wash. U. L. Q. 62, 64.

6. Restatement, Torts, § 158, Comments; Prosser, Law of Torts, (1955), p. 56.

7. Restatement, Torts, § 520 (1938).

8. 45 Calif. L. Rev. 390, 393.

9. Union Pacific Railroad Co. v. Vale Irrigation District, 253 F.Supp. 251, 258 (D.C. Ore., 1966); Laurance v. Tucker, 160 Or. 474 (1939); Boulevard Drainage System v. Gordon, 91 Or. 240 (1919); Stephens v. City of Eugene, 90 Or. 167 (1918); and Esson v. Wattier, 25 Or. 7 (1893) were all cited in support of this proposition.

10. Ure v. United States, 93 F.Supp. 779 (D.C. Ore. 1950).

11. Id. at 787.

12. 160 Or. 474, 85 P.2d 374 (1939).

13. Id. at 483.

14. 91 Or. 240, 177 P. 956, 178 P. 796 (1919).

15. 90 Or. 167, 175 P. 855 (1918).

16. Id. at 172.

17. 206 F. 234 (D.C. Ore. 1913).

18. Id., p. 235. Oregon has a six year statute of limitations for trespass actions. Plaintiff here was trying successfully to establish his action in trespass so as to come under the more lengthy statute of limitations.

19. Such an approach was suggested as a more appropriate ground for decision by a commentator on Martin v. Reynolds Metal Co., 221 Or. 86, 342 P.2d 790 (1959), involving the spread of fluoride particles onto neighboring lands. See 35 Wash. L. Rev. 474, at 478.

20. Supra, note 7.

21. 221 Or. 86, 342 P.2d 790 (1959).

22. Id. at 101.

III NEGLIGENCE

Negligence is a primary basis of liability for diverting water onto the land of another to his injury. Negligence was a basis for liability in all of the Oregon water cases discussed under the headings of Trespass and Strict Liability.[1] The only exception is the intentional trespass cases. Other Oregon cases have imposed liability for inadvertently causing water to run on the land of another on the basis of negligence.[2]

Basically one who without right or privilege proximately causes[2a] injury to the person or property of another as a result of conduct not conforming to the standard of care of a reasonable man is liable for such injury under the law of negligence.

Of special interest in the water cases is the doctrine of res ipsa loquitur. Three conditions are usually necessary for the imposition of that doctrine: 1) the accident must be of the kind which ordinarily does not occur without negligence; 2) it must be caused by an agency or instrument in the defendant's exclusive control, and 3) the plaintiff's conduct must not have contributed to the injury.[3] Thus, if water exclusively in the control of the defendant escapes and causes injury to adjacent parties, the defendant may well face a res ipsa loquitur instruction. The hitch for plaintiff is, of course, to establish that the accident is the kind which ordinarily does not occur without negligence.

The doctrine of res ipsa loquitur goes back to 1863. A pedestrian walking in front of a bakery was struck by a falling barrel of flour. The victim had no way of knowing how the accident occurred except that the barrel must have come from the bakery. Baron Pollock at the trial declared "there are certain cases of which it may be said res ipsa loquitur . . ." --- the thing speaks for itself.[4] For this reason the plaintiff was not required to present any evidence of negligence on the part of defendant other than the occurrence of the event itself. The doctrine as used today is a rule of evidence only. It gives rise to an inference of negligence ---

an inference which the jury may accept or reject in reaching its verdict.[5] The inference is always rebuttable by showing that the defendant exercised due care accompanied by a rational explanation of the occurrence.[6] The plaintiff is not even entitled to have the issue of negligence go to the jury unless reasonable men could conclude that more likely than not the event was due to defendant's negligence.[7]

Two cases arising in Oregon involving the application of the doctrine to escaping water are Suko v. Northwestern Ice Co.[8] and United States v. Ure.[9] In Suko, the defendant's elevated water tank burst causing injury to the plaintiff. Having limited the application of the Rylands v. Fletcher doctrine in the Patterson[10] case, the Oregon Supreme Court was not eager to reapply that doctrine. Instead, the court declared, ". . . In the ordinary course of events the mishap would not have occurred except through carelessness in the construction, inspection or use of the tank."[12] Thus, res ipsa loquitur applied.

In characterizing this approach, Judge Fee, in Ure v. United States,[13] noted that

> "[W]here a situation has potential elements of extreme hazard, the courts require a high degree of care and sometimes what they term the 'highest degree of care', which does not render the party under such a duty as an insurer, but requires him to have in contemplation the perilous potential results of his acts."[14]

Judge Fee thought the juxtaposition of this approach with res ipsa loquitur in Suko had been tantamount to an imposition of strict liability.[15] However, the Suko decision, at least in theory, was wholly dependent on an inference of negligence.

The Ure case involved the failure of an irrigation ditch which caused flooding to the plaintiff's land. Judge Fee concluded that the United States was liable for damage by flooding under Rylands v. Fletcher (Blackburn's version) as the law in Oregon.[15a]

When the Ure decision was appealed, Judge Fee's reasoning was regarded by the Court of Appeals for the Ninth Circuit as a decision possibly resting both on strict liability and on res ipsa loquitur.[16] Because the court held that the United

States could be sued under the Federal Torts Claims Act[17] only for negligent acts, the strict liability basis was necessarily irrelevant. However, res ipsa loquitur is based on an inference of negligence and not, at least in theory, on strict liability. The court then reviewed the evidence offered to rebut the inference of negligence and concluded that the evidence rebutted "all inferences which could properly have been drawn under the doctrine."[18] Apparently the court did not regard the degree of care owed the flooded plaintiffs as highly as did Judge Fee. Both opinions, however, seem to tacitly admit that water does not normally escape from an irrigation ditch without negligence on the part of someone. A distinction may be drawn between open breaks in a canal and mere percolation or seepage. The former may warrant a res ipsa loquitur instruction, but the latter may not.

1. Mallet v. Taylor, 78 Or. 208, 152 P. 873 (1915); Kaylor v. Recla, 160 Or. 254, 84 P.2d 495 (1938); Suko v. Northwestern Ice Co. (res ipsa loquitur) 166 Or. 557, 113 P.2d 209 (1941); Brown v. Gessler, 191 Or. 503, 230 P.2d 541 (1951); and Union Pacific Railroad Co. v. Vale Irrigation Dist., 253 F. Supp. 251 (D.C. Or., 1966). Ure v. United States, 93 F.Supp. 779 (D.C. Ore. 1950) would be an exception to the above statement except that the finding of liability was reversed on appeal because of sovereign immunity. See United States v. Ure, 225 F.2d 709 (C.A. 9th Circuit 1955).

   Cases of intentional trespass are cited in notes 12-17 of the chapter on trespass.

2. See e.g., Davidson v. O. & C. Railroad Co., 11 Or. 136 (1883); In many cases the plaintiff has alleged negligence but failed to prove it: see e.g., Conger v. Eugene Plywood Corp. 184 Or. 649, 200 P.2d 936 (1948).

2a. In the water law cases a consistent stumbling block for plaintiffs alleging injury to themselves caused by acts of others has been their failure to prove the acts proximately caused the injury. Without such proof there can be no liability. Cases in which plaintiff failed on an issue of causation include Coopey v. Cole, 140 Or. 51, 11 P.2d 550 (1932); Conger v. Eugene Plywood Co., 184 Or. 649, 200 P.2d 936 (1948); Allen v. McCormick, 193 Or. 604, 238 P.2d 220 (1952); Becker v. Tillamook Bay Lbr. Co., 194 Or. 134, 240 P.2d 237 (1952); and Nolen v. The Martin Brothers Container & Timber Products Corp., 236 Or. 631, 390 P.2d 175 (1964).

3. Prosser, Law of Torts, § 42, p. 199 (1955); Denny v. Warren, 239 Or. 401, 398 P.2d 123 (1964).

4. Byrne v. Bondle, 2 H&C 722, 159 Eng. Rep. 299 (1863).

5. Ritchie v. Thomas, 190 Or. 95, 224 P.2d 543 (1950).

6. Clark v. United States, 109 F.Supp. 213 (D.C. Or. 1953); Dunning v. Northwestern Electric Company, 186 Or. 379, 206 P.2d 1177 (1949).

7. Rambo v. Groshing, 239 Or. 520, 399 P.2d 21 (1965).

8. 166 Or. 557, 113 P.2d 209 (1941).

9. 225 F.2d 709 (9th Cir. 1955).

10. Patterson v. Horsefly Irrigation District, 157 Or. 1, 69 P.2d 282, 70 P.2d 33 (1937).

11. Suko, supra, n. 8, at 566.

12. Id. at 568.

13. 93 F.Supp. 779 (D.C. Or. 1950).

14. Id. at 788.

15. Id. at 788 and 790. The effect is the same as the application of the rule of strict liability.

15a. Ure v. United States, supra note 13.

16. United States v. Ure, 225 F.2d 709, 711 (9th Cir. 1955).

17. 28 U.S.C.A. §§ 1346, 2671 et seq.

18. U.S. v. Ure, 225 F.2d 709 at 712. Any element of negligence which could be inferred from the failure to line the canal which had ruptured was eliminated by a clause of the Tort Claims Act which exempted discretionary errors of federal employees. See 28 U.S.C.A. § 2680(a).

IV NUISANCE

Nuisance is another possible basis for the imposition of liability for injury caused by artificially diverted waters. Harper and James have written:

> It appears that liability for nuisance escaped the transition to fault principles which characterized most areas of tort law in the nineteenth century, no doubt because of its close relationship to the principles of the law of property. "Nuisance" has remained an isolated island of liability without fault and courts have resorted to "nuisance" terminology to impose liability when prompted by policy considerations emerging from the idea of the inviolability of private property rights, enterprises involving high risks, and the notion that expanding industry with its high profits should make good for loss caused to innocent by-standers in the rule of nearby property owners.[1]

Thus, nuisance may be another means of imposing strict liability.

Since any interference with the use and enjoyment of property may constitute nuisance, early Oregon cases involving invasion of land by water often included an allegation of nuisance.[2] However, to recover on a theory of nuisance, the harm to the plaintiff's interest must outweigh the utility of the activity which is causing the injury.[3] Public interest and convenience are superior to the interest of a private owner who alleges nuisance.[4]

Probably because of these drawbacks, nuisance largely ceased to be a significant basis of liability in those tort cases involving the invasion of waters decided after the Esson case.[5] This case introduced the Rylands v. Fletcher rule to Oregon law, which rule supplanted strict liability based on a nuisance theory.

1. Harper and James, Torts § 1.24, p. 69 (1956).

2. Marsh v. Trullinger (back-up water from a dam) 6 Or. 356 (1877); Ankeny v. The Fairview Milling Co. (seepage and overflow from a ditch) 10 Or. 390 (1882); and Esson v. Wattier (alleged overflow and percolation of a reservoir behind a dam) 25 Or. 7, 34 P. 756 (1893).

3. Gronn v. Rogers Const., Inc., 221 Or. 226, 350 P.2d 1086 (1960).

4. East St. Johns Shingle Co. v. City of Portland, 195 Or. 505, 246 P.2d 554 (1952).

5. Nuisance is today largely used where the invasion is by an intangible substance (e.g., light, noise, smells). Even these invasions have been partially brought into the realm of trespass by Martin v. Reynolds Metals Company, 221 Or. 86, 342 P.2d 790 (1959) and related decisions.

THE RIPARIAN DOCTRINE IN OREGON

I INTRODUCTION

The position of the riparian owner under common law has historically been an advantageous one. His ownership of land adjacent to a stream or body of water has given him unique rights typically described in terms of natural flow or reasonable use. The water of a stream did not belong to him, but he was frequently said in the Oregon cases to have a property right in its use, in the nature of a tenancy in common with all other owners on the same stream.[1] The difficulty of determining the rights of all owners of land bordering on a stream and of settling disputes by litigation is readily apparent. When there is added to this inherent difficulty the myriad problems accompanying a steadily increasing demand for water and a heightened public awareness of its importance as a necessary resource subject to public control, it is not surprising that the general trend of modern water law has been the modification of riparian rights, particularly in the western states. The development of the doctrine of prior appropriation in the semi-arid states of the West, under which a right to use the water depends upon priority in actually putting the water to beneficial use, encroached upon traditional riparian rights.

This paper summarizes the early Oregon riparian cases and examines the present status of riparian rights in Oregon. By way of introduction, there is a brief discussion of the accrual of riparian rights and the nature of riparian land. The major portion of the paper is devoted to the various rights which owners of such land have at present, considering to what extent they have been limited or changed by legislation or judicial modification.[2]

II ACCRUAL OF THE RIPARIAN RIGHT

Virtually all land titles in Oregon derive from the federal government as proprietor of the territory prior to statehood and of the public domain thereafter.[3] As a proprietor, the federal government held the normal riparian rights which

accompanied ownership of lands adjacent to streams or bodies of water. These rights usually passed with the land when the federal government conveyed it, whether to the State under various grants or to individuals under the various public land laws. In this sense then, Oregon joined the "California doctrine" states which recognized riparian rights rather than the Rocky Mountain and Great Basin states under the "Colorado doctrine" which repudiated riparian rights from the beginning in favor of prior appropriation. Prior to 1877, a patent to land in Oregon which had been in the public domain carried with it the appurtenant riparian rights.[4] In the case of a homestead patent, accrual of the right in the individual was held to relate back to the time of initial settlement, subject to compliance with the appropriate public land law, and issuance of the government patent.[5] Prior appropriation under federal law as a valid means of acquiring rights to water on the public domain was recognized very early by the Oregon Supreme Court, however,[6] and one who settled on public land took his riparian rights subject to any valid appropriation made prior to the date of settlement. The rights of the settler were superior to those of later appropriators from the stream.[7]

The Oregon Supreme Court held that the effect of the Desert Land Act of 1877[8] was to sever from all remaining public lands the right to use the water flowing through them for irrigation, manufacturing, and mining, and make this "right" available to the public for acquisition by appropriation.[9] This "legal severance" interpretation of the act has been approved by the United States Supreme Court.[10] Land in Oregon acquired from the federal government after March 3, 1877, the effective date of the act, carried with it no riparian rights to use the water for these purposes. The right of the riparian proprietor to use the water for other purposes, such as for domestic use and stock watering, was said in Oregon not to be affected by the Act.[11]

Although numerous Oregon cases were decided on the basis of riparian rights during the first fifty years of statehood, the state supreme court eventually decided that federal patents after March 3, 1877 (effective date of the Desert Land Act) carried no riparian rights and that appropriation law was dictated as to such lands by the Desert Land Act. This latter interpretation is apparently unique to Oregon but the court was free to be wrong in its interpretation of the impact of federal statutes upon state water law. In any event, at about the same time as the court was limiting lands to which riparian rights accrued, the Oregon Legislature in the 1909 Water Code cut off all inchoate riparian rights by defining water rights (both retroactively and prospectively) only in terms of actual beneficial use. Thus, both the judicial and legislative branches of government in Oregon moved at the same time in the same direction from riparianism to prior appropriation as the basic water law doctrine of the state. This transition leaves numerous Oregon decisions on riparian rights during the first fifty years or so of statehood in the books, but many such decisions have little precedent value today in resolving disputes between private water users and may serve to confuse the uninformed. A present day water law problem must be analyzed in the light of this doctrinal transition and a determination made as to whether the older riparian cases have current vitality as precedents in resolving the problem.

The older Oregon law based on the riparian doctrine is organized and discussed here and an attempt made to place it both in historical perspective and in terms of modern applicability.

III WHAT IS RIPARIAN LAND UNDER OREGON LAW

Riparian land must directly abut a stream or body of water. Mere proximity to water is not enough to give the land riparian status, if a strip of land in separate ownership, however narrow, intervenes between the land in question and the water's edge.[12] As a general rule, land is considered to be riparian to a stream only if it is within the natural watershed of that stream.[13] In Oregon, however, this rule

has been rejected in favor of the "unity of title" theory. The test in Oregon is contiguity of ownership -- if one owns riparian land, all other land that he owns which is contiguous with the land which borders the stream is considered riparian, regardless of when or in what order he acquired title to various parcels, and regardless of the relationship of the land to the stream system.[14]

In order for the land to be considered riparian, the adjacent water must have the status of a permanent body of water or a watercourse, as opposed to mere diffused surface water.[15] The Oregon Supreme Court's basic definition of a watercourse was formulated in Simmons v. Winters.[16] After a review of many authorities, the court said that a watercourse is:

> . . . a stream of water usually flowing in a particular direction, with well-defined banks and channels, but . . . the water need not flow continuously -- the channel may sometimes be dry; . . . the term watercourse does not include water descending from the hills, down the hollows and ravines, without any definite channel, only in times of rain and melting snow, but . . . where water, owing to the hilly or mountainous configuration of the country accumulates in large quantities from rain and melting snow, and at regular seasons descends through long, deep gullies or ravines upon the lands below, and in its onward flow carves out a distinct and well-defined channel, which even to the casual glance bears the unmistakable impress of the frequent action of running water, and through which it has flowed from time immemorial -- such a stream is to be considered a watercourse. . .[17]

The best physical indications of a watercourse appear to be a channel which can be readily seen on the ground when the stream is dry,[18] and a supply of water which flows regularly or periodically, although it need not flow continuously.[19] Even though the channel may not be definite throughout its length, as when water spreads out over low or swampy ground for some distance before being again confined in a channel, the entire stream will be considered a water course if the current and the course are clearly perceptible.[20] Similarly, flood waters remain part of the watercourse even though they have escaped the channel and spread over the surrounding land, provided that they have not become completely separated or disassociated from the stream.[21]

Occasionally, the language of an opinion will appear to require that a "watercourse" be a stream which has existed from "time immemorial," or an "ancient watercourse."[22] However, the period of the statute of limitations seems to suffice to bring into being a watercourse with attendant riparian rights.[23]

An underground stream, if its course can be ascertained with reasonable certainty without excavation, was governed under early case law by the same riparian rules as those applied to surface watercourses.[24]

This discussion of the definition of a watercourse may have relevance today because of the general rule that a permit is required for the appropriation of any water from a watercourse.

1. In re Deschutes River, 134 Or. 623, 294 P. 1049 (1930); In re Hood River, 114 Or. 112, 227 P. 1065 (1924); Williams v. Altnow, 51 Or. 275, 95 P. 200, 97 P. 539 (1908).

2. See Hutchins, The Common-Law Riparian Doctrine in Oregon: Legislative and Judicial Modification, 36 Or. L. Rev. 193 (1957) for a thorough treatment of the historical decline of the riparian right to use water in Oregon. That discussion is not repeated in full here.

3. Shively v. Bowlby, 152 U.S. 1, 51, 14 S.Ct. 548, 38 L.Ed. 331 (1894).

4. Brown v. Baker, 39 Or. 66, 68, 65 P. 799, 66 P. 193 (1901); Norwood v. Eastern Oregon Land Co., 112 Or. 106, 111, 227 P. 1111 (1924); see also Lewis v. McClure, 8 Or. 273 (1880) (riparian rights of those in lawful possession of unsurveyed public land).

5. Faull v. Cooke, 19 Or. 455, 464, 26 P. 662 (1890); Morgan v. Shaw, 47 Or. 333, 337, 83 P. 534 (1906).

6. Lewis v. McClure, 8 Or. 273 (1880); Kaylor v. Campbell, 13 Or. 596, 11 P. 301 (1886).

7. Brown v. Baker, 39 Or. 66, 68-70, 65 P. 799, 66 P. 193 (1901); Morgan v. Shaw, 47 Or. 333, 337, 83 P. 534 (1906).

8. Act of Congress of March 3, 1877, c. 107, 19 Stat. 377; Section I provides that "the water of all lakes, rivers and other sources of water supply upon the public lands and not navigable shall remain and be held free for the appropriation and use of the public for irrigation, mining and manufacturing purposes subject to existing rights."

9. Hough v. Porter, 51 Or. 318, 383-407, 95 P. 732 (1908), 98 P. 1083 (1909), 102 P. 728 (1909).

10. California-Oregon Power Co. v. Beaver Portland Cement Co., 295 U.S. 142, 160-63 (1935).

11. Hough v. Porter, 51 Or. 318, 404, 407, 95 P. 732, 98 P. 1083, 102 P. 728 (1909).

12. Kingsley v. Jacobs, 174 Or. 514, 524, 149 P.2d 950 (1944).

13. 1 R. E. Clark, Waters and Water Rights 53.5(C) (1967).

14. Jones v. Conn, 39 Or. 30, 64 P. 855, 65 P. 1068, 87 Am. St. Rep. 634, 54 L.R.A. 630 (1901).

15. Levene v. City of Salem, 191 Or. 182, 229 P.2d 255 (1951).

16. 21 Or. 35, 27 P. 7 (1891). This case involved appropriative, not riparian, rights. There is nothing in the case law to suggest that the distinction is important in determining whether a watercourse exists.

17. Id. at 41-42.

18. Id.; Borman v. Blackman, 60 Or. 304, 308-309, 118 P. 848 (1911); Hansen v. Crouch, 80 Or. 141, 146, 193 P. 454 (1920); Wellman v. Kelley & Harrison,

197 Or. 553, 569, 252 P.2d 816 (1953).

19. Shively v. Hume, 10 Or. 76-77 (1881); Borman v. Blackman, 60 Or. 304, 308-309, 118 P. 848 (1911); Hansen v. Crouch, 98 Or. 141, 146, 193 P. 454 (1920).

20. West v. Taylor, 16 Or. 165, 166-67 (1888); Mace v. Mace, 40 Or. 586, 67 P. 660, 68 P. 737 (1902); Hough v. Porter, 51 Or. 318, 415, 95 P. 732, 98 P. 1083 (1909); Wright v. Phillips, 127 Or. 420, 426, 272 P. 554 (1928); Wellman v. Kelley and Harrison, 197 Or. 553, 568, 252 P.2d 816 (1953).

21. Price v. Oregon Railroad Co., 47 Or. 350, 358-60, 83 P. 843 (1906); Wellman v. Kelley & Harrison, 197 Or. 553, 565, 252 P.2d 816 (1953).

22. Simmons v. Winters, 21 Or. 35, 42, 27 P. 7 (1891); Mace v. Mace, 40 Or. 586, 67 P. 660, 68 P. 737 (1902); Hansen v. Crouch, 98 Or. 141, 146, 193 P. 454 (1920).

23. Pacific Livestock Co. v. Davis, 60 Or. 258, 262, 119 P. 147 (1911); Hough v. Porter, 51 Or. 318, 414-15, 95 P. 732, 98 P. 1083 (1909). In the latter case, natural "high-water" channels had been artificially opened to permit the water to flow through them regularly. The court pointed out that this had been done with the acquiescence of all on the stream, and had been allowed to continue for the statutory period. On the effect of artificial changes, see also Harrington v. Demaris, 46 Or. 111, 118-19, 77 P. 603, 82 P. 14 (1905); Cottel v. Berry, 42 Or. 593, 72 P. 584 (1903).

24. Shively v. Hume, 10 Or. 76 (1881); Hayes v. Adams, 109 Or. 51, 58, 218 P. 933 (1923).

IV RIGHTS IN THE FLOW OF THE WATER

A. Right to Undiminished Continuous Flow

On occasion, the Oregon Supreme Court said in early cases that the riparian owner has a right to have the stream flow continuously through his land in its natural state without diminution.[1] This absolute right based on a "state of nature" theory appears never to have been the law of Oregon, however. Each riparian proprietor was early held to have the right to make reasonable use of the water, with due regard for the same rights in other riparians on the stream.[2] He was, however, entitled to insist upon the flow of the stream undiminished by unreasonable or unnatural uses.[3]

In Weiss v. Oregon Iron and Steel Co.,[4] a downstream owner was held entitled to an injunction against an upstream owner who was diverting one fifth or more of the water of the stream, using it for manufacturing purposes, and not returning any of it to the stream. Plaintiff was held entitled to relief although he showed little or no actual damage, in order to permit him to protect his rights in the stream against possible loss by adverse use.

In Jones v. Conn,[5] however, it was said that the plaintiff had to show actual injury in order to be entitled to an injunction against an upstream diversion. The distinction between the two cases may be in the use to which the water was put by the upstream owner. In Weiss the use was wasteful, and the court was adamant:

> . . . the diversion of a watercourse, or a part of it, by an upper riparian proprietor for manufacturing purposes, without restoring to the channel the excess of water not actually consumed, is never allowed. That cannot be considered a reasonable exercise of the right to use the water of a stream which involves its substantial diminution and waste.[6]

In Jones, on the other hand, the upstream proprietor was diverting the water for irrigation use. Since all riparian owners had a right to some use of the water for irrigation,[7] it could be said that actual injury to the downstream owner is necessary in order to demonstrate that an upstream irrigator has gone beyond a

reasonable use of the water. In that case, however, the court did not seem overly concerned with the unity of the stream as a basis for determining the rights of the various riparian owners. Rather, it announced that the watershed limitation was not the law of Oregon, thus permitting the waters of the stream to be used for irrigation on lands which drained out of the watershed, so long as they were owned by the riparian owner and were contiguous with his riparian land.[8] Adoption of this minority rule deprived the downstream owners of water which would otherwise have returned to the stream by seepage, after application to land within the watershed.

No cases have been found subsequent to the adoption of the 1909 Water Code protecting the right of a riparian owner to the continuous flow of the stream. In Pacific Livestock Co. v. Davis,[9] the suit was commenced prior to the enactment of the Code. The court indicated that it predicated its decree on the ground that both parties claimed riparian ownership and neither alleged an appropriation. The decree gave plaintiff a right to have one third of the water of Rattlesnake Creek flow onto his land through its West Fork, and enjoined defendants, upstream proprietors on the West Fork, from interfering with the flow so as to interfere with this right. One third of the water of Rattlesnake Creek appears to be the total amount which the court found to flow naturally through the West Fork.

A recent case, Fitzstephens v. Watson,[10] although not concerned with the right to an undiminished flow, indicates that in any situation involving a dispute between riparian owners who could not claim as appropriators, riparian doctrines will be applied. As against one who claims rights by appropriation under the Water Code, however, the riparian owner can claim no right in the undiminished flow, but must base his claim upon his own appropriation or a previous application to beneficial use.[11]

B. Right to Unincreased Flow and Pure Water

In spite of the general statements of riparian rights sometimes encountered in the cases,[12] there appear to be in Oregon no independent riparian rights to have

the stream flow unincreased or unpolluted. Recovery for such interference with a watercourse depends upon a showing of actual damage,[13] and apparently damages or injunctions cannot be had for the mere technical invasion of the right as was suggested in the case of Weiss.[14] In this sense, the riparian owner stands upon the same footing as the non-riparian. He is merely more likely to be injured. Damage from flooding caused by increasing the waters in the stream would be actionable, even though the lands in question had been non-riparian, on the same theory of trespass to real property as is employed in the cases of damage to riparian owners.[15] In pollution cases, while plaintiff must have a water right to be entitled to complain,[16] he must show in addition an invasion of his right to use the water or some other form of actual damage.[17] No Oregon cases have been found which hold or suggest that a public-spirited riparian proprietor could secure an injunction on common law principles against an upstream polluter by virtue of his riparian status alone.

Increase in flow: In Miller v. City of Woodburn,[18] plaintiff complained of damage to his land from an upstream discharge of sewage into the stream which increased its flow. It was held that the City had no right to use the stream in this way, and that if plaintiff could show that his lands had been damaged as he claimed, by being rendered undrainable, he would be entitled to damages. In a later phase of the litigation,[19] however, in which plaintiff sought to have the sewage discharge enjoined, he was held not entitled to relief because he had been unable to prove a substantial injury.

In Levene v. City of Salem,[20] the downstream riparian owner recovered for damages to his property resulting from flooding of the stream when the city drained surface waters into the stream at an upstream location. Injunctions have been granted against an upstream owner to prevent him from storing water and then releasing it in large quantities, to the injury of land downstream,[21] and against a downstream owner, to prevent him from maintaining a dam and backing up water to

the injury of the upstream land.[22] And in Stephens v. City of Eugene,[23] a downstream owner was entitled to an injunction and damages when the city operated electric and waterworks upstream, increasing the flow and destroying plaintiff's ford over his stream.

Pollution: Oregon case law involving private rights to the purity of water is sparse. The general rule is said by Farnham to be that the rights of the riparian owner include

> . . . the right to have the purity of the water preserved so far as it reasonably may be. But it does not include the right to be free from such pollution as is incident to the reasonable use of the stream by upper proprietors, and the natural wash and drainage coming from towns and cities. Equity will not interfere by injunction unless the injury is perceptible.[24]

Some of the difficulties of this area of the law have been noted by Clark:

> Under the American reasonable-use rule pollution is an unreasonable use, but a precise definition of pollution has proved troublesome and there are additional problems in determining how much pollution is reasonable. Moreover, the test of reasonable use raises further questions regarding the property rights of different economic and community interests and their relative importance to the community.[25]

In Brown v. Gold Coin Mining Co.,[26] plaintiff complained that the "tailings" from defendant's upstream quartz mill accumulated in his irrigation ditches, obstructing them and also making the water of the stream unfit for domestic and stock-watering use. The claim of injury to the ditches was dealt with by the court as based on plaintiff's priority as an appropriator. However, the use for domestic and stock-watering purposes was treated as a riparian right entitling plaintiff to an injunction, even though there were other streams on his land from which he could have obtained clean water.

In another case involving pollution of water used for stock-watering,[27] the Oregon Supreme Court found it unnecessary to decide whether plaintiff was, strictly speaking, a riparian owner. The pollution took place in a swale with little or no current. The defendant contended that it was not a watercourse, but the court held

that even if it were only diffused surface water, defendant, after polluting the water, had a duty to prevent its flowing onto plaintiff's land in that condition.[28] The theory of the case was nuisance.

Trespass was the theory used in another case involving mining tailings,[29] where no consumptive use of the water was involved. Again, plaintiff objected to the obstruction of his diversion ditches by deposits of the tailings. Although plaintiff (the downstream owner) was also the prior appropriator, the court framed the issue in terms of the relative locations on the stream rather than on the respective priorities.[30]

This last case contains some indication that a prescriptive right to pollute may be acquired. Defendant claimed such a right, but the court found that, although defendant and its predecessors had been dumping debris into the stream for the statutory period, plaintiff had suffered no material injury during much of that time. The statute of limitations did not begin to run until the commencement of the injury.[31]

The comprehensive Oregon statutes now in force dealing with water pollution should prevent the acquisition of a prescriptive right to pollute. Waste discharge into waters, effective January 1, 1968, is to be by permit only.[32] Pollution of water is declared to be "not a reasonable or natural use of such waters and contrary to the public policy of the State of Oregon."[33] Discharging waste without a permit, or in violation of the terms of a permit, or in any way causing the pollution of any waters of the state, is declared to be a public nuisance[34] and made punishable by a fine of up to $1000, or a term of up to one year in the county jail or both. Each day of a violation is to be treated as a separate offense.[35]

Because as between private parties, "the statute of limitations does not run against a public nuisance no matter how long continued,"[36] new prescriptive rights to pollute should now be out of the question.

Two doctrines limit somewhat the right of the riparian owner to protection against damage from pollution. The first is the duty to mitigate damages. In Adams v. Clover Hill Farms,[37] plaintiff was held entitled to an injunction, but his damages were reduced because it would have been possible at small expense to have reduced the pollution in the water his stock drank by sinking barrels into the ground, into which the water could percolate and be thus purified. But in Miller v. City of Woodburn,[38] the city's sewage dumping was said to be a public nuisance,

> . . . and the burden of authority is to the effect that a plaintiff who comes into court for damage to his property by reason of a public nuisance created or maintained by the defendant is not required to minimize his damage.[39]

The other limiting doctrine is that of "coming to the nuisance." In East St. Johns Shingle Co. v. City of Portland,[40] plaintiffs sought to recover damages from the city for injuries resulting from its discharge of raw sewage into the Columbia Slough. Plaintiffs used the slough, which was navigable, to raft logs to their mills on riparian property. The damage complained of was devaluation of the property, and increased operating costs in the mills because the logs became coated with sewage. Plaintiffs relied on the theory of public nuisance, claiming to be damaged in a special way different from the general public.

The Supreme Court denied plaintiffs any recovery because they had bought their properties at a time when the sewage was already being discharged in the slough, and either knew or should have known of this. The precise holding was

> . . . a private party is estopped to sue a municipality for damages for a special injury arising out of a public nuisance having its origin in the operation of a recognized and duly authorized governmental function for the general public good, when the operation with its attendant nuisance existed prior to the party's acquisition of property in its vicinity and upon or to which property the alleged damage occurred, when the nuisance causing the injury was known or should have been known to such party at the time he acquired his holding . . . [41]

The court emphasized that it was not relaxing the well-established rule that "a municipal corporation does not have the right to increase the natural flow of a

stream or to pollute its waters to the material injury of a riparian owner."[42] Nor did the court adopt the "coming to the nuisance" doctrine in its entirety. Whether it will be applied between private parties remains an open question.

1. Taylor v. Welch, 6 Or. 200 (1876); Shively v. Hume, 10 Or. 76 (1881); Harris v. Southeast Portland Lumber Co., 123 Or. 549, 556-57, 262 P. 243 (1928).

2. Shook v. Colohan, 12 Or. 239, 244, 6 P. 503 (1885); Jones v. Conn, 39 Or. 30, 34, 64 P. 855, 65 P. 1068 (1901); Williams v. Altnow, 51 Or. 275, 298, 95 P. 200, 97 P. 539 (1908).

3. Weiss v. Oregon Iron & Steel Co., 13 Or. 496, 11 P. 255 (1886); Shively v. Hume, 10 Or. 76 (1881); Shook v. Colohan, 12 Or. 239 (1885).

4. 13 Or. 496, 11 P. 255 (1886).

5. 39 Or. 30, 64 P. 855, 65 P. 1068 (1901).

6. 13 Or. 496, 502, 11 P. 255 (1886).

7. Coffman v. Robbins, 8 Or. 278, 282 (1880).

8. 39 Or. 30, 64 P. 855, 65 P. 1068 (1901).

9. 60 Or. 258, 119 P. 147 (1911).

10. 218 Or. 185, 344 P.2d 221 (1959).

11. In re Hood River, 114 Or. 112, 173-82, 227 P. 1065 (1924); California-Oregon Power Co. v. Beaver Portland Cement Co., 73 F.2d 555-569 (9th Cir. 1934); ORS 539.010 (1971); In re Willow Creek, 74 Or. 592, 144 P. 505 (1914).

12. Harris v. Southeast Portland Lumber Co., 123 Or. 549, 556-57, 262 P. 243 (1928), Jones v. Conn, 39 Or. 30, 34, 64 P. 855, 65 P. 1068 (1901).

13. Adams v. Clover Hill Farms, 86 Or. 140, 167 P. 1015 (1917); Carson v. Hayes, 39 Or. 97, 65 P. 814 (1901); Miller v. City of Woodburn, 134 Or. 536, 294 P. 349 (1930).

14. See note 4, supra, and accompanying text.

15. See, e.g., Stephens v. City of Eugene, 90 Or. 167, 175 P. 855 (1918), Kamm v. Normand, 50 Or. 9, 91 P. 448 (1907).

16. In Columbia Fisherman's Union v. St. Helens, 160 Or. 654, 87 P.2d 195 (1939), it was held that licensed commercial fishermen had a sufficient special interest in the waters of a navigable stream to entitle them to an injunction to prevent pollution which killed the fish.

17. Brown v. Gold Coin Mining Co., 48 Or. 277, 86 P. 361 (1906); Adams v. Clover Hill Farms, 86 Or. 140, 167 P. 1015 (1917).

18. 126 Or. 621, 270 P. 781 (1928).

19. Miller v. City of Woodburn, 134 Or. 536, 294 P. 349 (1930).

20. 191 Or. 182, 229 P.2d 255 (1951).

21. Kamm v. Normand, 50 Or. 9, 91 P. 448 (1907).

22. Harris v. Southeast Lumber Company, 123 Or. 549, 262 P. 243 (1928).

23. 90 Or. 167, 175 P. 855 (1918).

24. 1 Farnham on Water Law 286.

25. 1 R. E. Clark, Waters and Water Rights 55.6 (1967) (footnotes omitted).

26. 48 Or. 277, 86 P. 361 (1906).

27. Adams v. Clover Hill Farms, 86 Or. 140, 167 P. 1015 (1917).

28. Id. at 144.

29. Carson v. Hayes, 39 Or. 97, 65 P. 814 (1901).

30. Id. at 102.

31. Id. at 106-107.

32. ORS 449.083 (1967).

33. ORS 449.095 (1967).

34. ORS 449.079 (1967).

35. O.L. 1967 c. 426, sec. 18. These penalties should be set out in ORS 449.990 (3). The 1967 revision is in error in that subsection.

36. Laurance v. Tucker, 160 Or. 474, 479, 85 P.2d 374 (1939); see also Sweet v. Irrigation Canal Co., 198 Or. 166, 196, 254 P.2d 700, 256 P.2d 252 (1953).

37. 86 Or. 140, 167 P. 1015 (1917).

38. 126 Or. 621, 270 P. 781 (1928).

39. Id. at 628.

40. 195 Or. 505, 246 P.2d 554 (1952).

41. Id. at 527.

42. Id. at 527.

V. RIPARIAN RIGHT TO USE WATER

A. Early Oregon Case Law

The riparian owner, under early Oregon law, had the right to the use of the water flowing through his land for what have been called "natural uses" or for the "ordinary purposes of life."[1] These uses included drinking and culinary purposes, watering stock and domestic animals, and probably watering or irrigating a garden for household use.[2] For these "natural" purposes, he was said to be entitled to use as much water as was necessary, even though this left no water for downstream owners.[3] Other uses, like irrigation or manufacturing (sometimes called "extra-ordinary" uses[4]) could be made only if other riparian owners on the stream were not injured.[5] For these purposes, the rights of all the owners on the stream were coequal, and it is suggested in one case that a division of the "surplus" waters could be made among the riparian owners for irrigation purposes.[6]

1. Shook v. Colohan, 12 Or. 239, 244, 6 P. 503 (1885); see also Jones v. Conn, 39 Or. 30-35, 64 P. 855, 65 P. 1068 (1901); Brown v. Baker, 39 Or. 66, 70, 65, P. 799, 66 P. 193 (1901); Williams v. Altnow, 51 Or. 275-298, 95 P. 200, 97 P. 539 (1908); In re Willow Creek, 74 Or. 592, 626, 144 P. 505, 146 P. 475 (1915).

2. Coffman v. Robbins, 8 Or. 278, 282 (1880); Shook v. Colohan, 12 Or. 239, 244, 6 P. 503 (1885); Jones v. Conn, 39 Or. 30-34, 64 P. 855, 65 P. 1068 (1901); Hough v. Porter, 51 Or. 318, 403-404, 95 P. 732, 98 P. 1083 (1909); Caviness v. La Grande Irr. Co., 60 Or. 410-420, 119 P. 731 (1911); Hedges v. Riddle, 63 Or. 257-260, 127 P. 548 (1912).

3. Caviness v. La Grande Irr. Co., 60 Or. 410, 420, 119 P. 731 (1911); In re Sucker Creek, 83 Or. 228, 235, 163 P. 430 (1917).

4. Jones v. Conn, 39 Or. 30, 34-35, 64 P. 855, 65 P. 1068 (1901) quoting Miner v. Gilmour, 12 Moore P.C. 131, 156.

5. Williams v. Altnow, 51 Or. 275, 298, 95 P. 200, 97 P. 539 (1908). In re Willow Creek, 74 Or. 592, 627, 144 P. 505, 146 P. 475 (1915).

6. Shook v. Colohan, 12 Or. 239, 244, 6 P. 503 (1885).

B. Loss of Riparian Rights - Claiming As An Appropriator in the Transition From Riparianism to Appropriation

The right to use water as a riparian owner may be lost by electing to claim water rights as an appropriator. Although the time element has not been decisive in any of the many Oregon cases which have stated this rule, the court's language indicates that this election may take place at any time. It has been said that the choice takes place at the time of first use of the water by the initial settler,[1] at any time that he asserts his right against subsequent claimants,[2] and at the time he asserts it in litigation over his right to water.[3] The court speaks sometimes of a "waiver" of riparian rights by one claiming as an appropriator,[4] and sometimes of an "abandonment."[5] There is language in one case which might indicate that such a waiver is temporary only,[5a] but the general trend of the decisions is that one who once claims a right to use a predetermined amount of water as against all subsequent claimants will thereafter be regarded as an appropriator.[6]

Where the use of the water is one which requires a diversion, such as irrigation, the diversion is probably strong evidence of an appropriation.[7] Where the date of a diversion of water is relied on to establish a right to the use of water, the party will apparently always be treated by the court as an appropriator.[8] But where the use is non-consumptive, as in the case of power generation, the court must decide upon the basis of the pleadings and other matters of record whether the right asserted is based on an appropriation or upon riparian ownership.[9] Any request for a decree of a specific amount of water would probably be fatal to an attempt to rely on riparian rights.[10] And because a vested riparian right is, since 1909, measured by the application of water to a beneficial use,[11] most users seek a decree for the amount which they can prove has been so applied.

In summary, the Oregon Supreme Court has facilitated the transition from riparianism to appropriation by finding various ways in which to describe a riparian's claim in appropriative terms.

1. North Powder Milling Co. v. Coughanour, 34 Or. 9, 22, 54 P. 223 (1898); Brown v. Baker, 39 Or. 66, 70, 65 P. 799, 66 P. 193 (1901); Williams v. Altnow, 51 Or. 275, 299-300, 95 P. 200, 97 P. 539 (1908); Davis v. Chamberlain, 51 Or. 304, 311, 98 P. 154 (1908); In re Sucker Creek, 83 Or. 228, 234, 163 P. 430 (1917); Norwood v. Eastern Oregon Land Co., 112 Or. 106, 112, 227 P. 1111 (1924).

2. Bowen v. Spaulding, 63 Or. 392, 395, 128 P. 37 (1912).

3. Caviness v. La Grande Irr. Co., 60 Or. 410, 421-22, 119 P. 731 (1911); In re Schollmeyer, 69 Or. 210, 212, 138 P. 211 (1914); Hedges v. Riddle, 75 Or. 197, 198-99, 146 P. 99, 146 P. 964 (1915).

4. Davis v. Chamberlain, 51 Or. 304, 311, 98 P. 154 (1908), Caviness v. La Grande Irr. Co., 60 Or. 410, 411, 199 P. 731 (1911); In re Schollmeyer, 69 Or. 210, 212, 138 P. 211 (1914); Hedges v. Riddle, 75 Or. 197, 198-99, 146 P. 99, 146 P. 964 (1915); In re Sucker Creek, 83 Or. 228, 234, 163 P. 430 (1917).

5. Bowen v. Spaulding, 63 Or. 392, 395, 128 P. 37 (1912); Norwood v. Eastern Oregon Land Co., 112 Or. 106, 112, 227 P. 111 (1924).

5a. Caviness v. La Grande Irr. Co., 60 Or. 410, 422, 119 P. 731 (1911): ". . . and must be held to have waived his rights as a riparian proprietor, at least for the purposes of this suit."

6. But see Davis v. Chamberlain, 51 Or. 304, 316, 98 P. 154 (1908) where, in the converse situation, a prior decree protecting plaintiff's riparian rights did not bar him from bringing a later suit against another party as an appropriator. The question does not appear to have been raised by the parties.

7. See, e.g., Brown v. Baker, 39 Or. 66, 65 P. 799, 66 P. 193 (1901); Davis v. Chamberlain, 51 Or. 304, 98 P. 154 (1908).

8. Caviness v. La Grande Irr. Co., 60 Or. 410, 119 P. 731 (1911); In re Schollmeyer, 69 Or. 210, 138 P. 211 (1914); In re Sucker Creek, 83 Or. 228, 163 P. 430 (1917).

9. See, e.g., In re Hood River, 114 Or. 112, 160-61, 227 P. 1065 (1924), where a power company's prayer for a decree to a specific amount of water was held to amount to a claim as an appropriator, even though the company clearly intended to assert riparian rights.

10. Id. But see Norwood v. Eastern Oregon Land Co., 112 Or. 106, 227 P. 1111 (1924) where the land company's rights were regarded as riparian, even though the trial court had decreed a specific allotment for irrigation. The Supreme Court expressed some doubt about the propriety of the decree, but did not find that the company's riparian rights could not be asserted.

11. ORS 539.010(1) (1955).

VI RIPARIAN RIGHTS AFTER THE 1909 WATER CODE

A. Effect of the 1909 Water Code

The 1909 Oregon Water Code simply abolished "unused" riparian rights, i.e., it did not recognize a riparian's inchoate right to make a future reasonable use of surface water as a riparian under the common law doctrine. The acquisition of surface water rights after the enactment of the Code must be accomplished under the permit system and the doctrine of beneficial use.[1]

Although the Code preserved all riparian rights which were "vested" at the time of its effective date, it defined a vested riparian right as measured by the prior application of the surface water to a beneficial use.[2] This definition is lifted from the standard definition of an appropriate right.

The question has not arisen whether a riparian owner could now claim a right to the use of surface water for necessary household and domestic purposes as against a prior appropriator. Domestic uses were preferred under the riparian doctrine and were exempt from the "severance" interpretation of the Desert Land Act which legally cut off other inchoate riparian uses as to federal patents issued after 1877 in Oregon. If the riparian domestic use has not "vested" by actual use prior to 1909, it is very doubtful if such a claim could be successfully asserted now outside of the permit system.

The 1909 Water Code includes no exemptions for domestic uses[3] and invokes the permit system as the exclusive method of acquiring a water right and priority in time as the test of the protected right in times of shortage. These statutory provisions appear to leave no room for a riparian's claim qua riparian to domestic water from a surface source.

In Norwood v. Eastern Oregon Land Co.[4] the defendant company owned land which had been acquired from the United States prior to passage of the Desert Land Act in 1877. The company had previously submitted its water right to adjudication[5] and had been awarded a right to the use of a specific amount for irrigation by virtue of

its past use of the annual overflow for that purpose. The company had made no artificial diversion of the water, nor had it constructed a distribution system. At issue in the Norwood case was the validity of an order of the Water Board permitting the company to transfer its water right from the land in question to land upstream from plaintiff's diversion point. The court stated that the right awarded the company in the prior adjudication had been a riparian right and thus could not be transferred to other land. The court noted that it did not have to pass on the propriety of a decree granting a riparian owner the right to a specific amount of water (although it characterized the decree as being a limit on the company's use in order to prevent waste), but it was clearly the opinion of the court that the right was riparian in nature, rather than appropriative.

As is pointed out in the concurring opinion, the court could have reached the same result had it viewed the company's rights as based on an appropriation by virtue of past use of the overflow waters, since under the statutes an appropriative right cannot be transferred to other lands if such a transfer will injure the existing rights of others on the stream.[7]

Later in the same year, without reference to Norwood, the court in In re Hood River[8] held that a power company could claim no right to have water continue flowing past its lands except what it could claim by virtue of prior appropriation, even though some of the lands were acquired by the company prior to 1877, and most of the rest had been conveyed to the state by the United States prior to that date and conveyed to the company prior to any state legislation limiting riparian rights. The court's holding is based in part on the company's request for a decree for a certain amount of water, although throughout the litigation the company had characterized its rights as riparian, and asserted that it had "voluntarily" limited itself in its prayer to the amount of water it planned to use. The court said that to follow the "continuous flow" rule would "take the heart out of" the 1909 Water Code. It also read In re Willow Creek[9] as having denied the claim of the Eastern

Oregon Land Co. to riparian rights and limiting it to rights acquired by appropriation. This reading is consistent with general statements in Hood River that a riparian right cannot be declared in advance to be for a definite quantity of water, and that riparian rights cannot be adjudicated as such in proceedings to determine relative rights of parties along a water system under the 1909 Water Code.

probably need not be. Norwood appears to be an aberration, and the same decision could have been reached if the company's right had been considered an appropriation. But it can be pointed out that both the Norwood and Hood River cases resulted in holdings in favor of the rights of an appropriator as against the rights (asserted or recognized) of a riparian. Also it is notable that Norwood involved a water right which had actually been applied to a beneficial use while the riparian claim in Hood River was for the "right" to the continued flow in order to put it to a prospective use.

1. ORS 537.130 (1967).

2. ORS 539.010(1) (1967): "Actual application of water to beneficial use prior to February 24, 1909, by or under authority of any riparian proprietor or his predecessors in interest, shall be deemed to create in the riparian proprietor a vested right to the extent of the actual application to beneficial use; provided such use has not been abandoned for a continuous period of two years."

   (7) "The Water Rights Act shall not be held to bestow upon any person any riparian right where no such rights existed prior to February 24, 1909.

3. The Underground Water Act of 1955 does provide for an exemption from the permit system for domestic water up to 15,000 gallons a day. ORS 537.545.

4. 112 Or. 106, 227 P. 1111 (1924).

5. That adjudication reached the Oregon Supreme Court in In re Willow Creek, 74 Or. 592, 144 P. 505, 146 P. 475 (1914).

6. Such a reading of the adjudication decree would have been a reasonable one. In addition to a specific amount of water, the decree granted the company a priority date. In re Willow Creek, 74 Or. 592, 621, 144 P. 505, 146 P. 475 (1914).

7. ORS 540.530 (1967).

8. 114 Or. 112, 227 P. 1065 (1924).

9. Supra note 5.

CLASSIFICATION OF WATERS

I. SOURCE TYPES IDENTIFIED

Water in its natural state is available from several types of sources. While we now recognize that physically these source-types are interdependent, the law continues to classify water according to the source-type and apply different rules to different classifications. The commonly recognized source-types are: (1) diffused surface water, (2) diffused underground percolating water, (3) surface water in watercourses, (4) underground water in watercourses, (5) lakes or ponds not shown to be connected with a watercourse, (6) spring waters, (7) waste waters, and (8) waters in artificial waterways.[1]

II DISCUSSION OF SOURCE TYPES

A. Diffused Surface Water

Diffused surface water is water derived from falling rain and melting snows which is diffused over the surface of the earth in no defined channel.[2] Once such waters reach some well-defined channel they cease to be surface water and become part of a watercourse.[3] At this point they become public waters subject to the law of appropriation. Surface waters are not subject to appropriation and indeed much of the litigation involving diffused surface waters concerns a landowner's tort liability for fending the water off of his land.[4]

B. Diffused Underground Percolating Water.

Subterranean percolating water, like diffused surface water, at common law was not subject to appropriation, but rather was part and parcel of the land on which it was found.[5] Subsurface water is considered to be percolating water unless it can be shown that it flows in a well-defined underground channel. Such fact must be reasonably established from the surface of the earth and without excavation.[6] The Oregon Ground Water Act of 1955 now provides for the appropriation of percolating water under a broad definition of "ground waters." [ORS 537.515(3)]

C. Surface Water in Watercourses.

Because surface water in watercourses was the first source-type subject to

appropriation, the Oregon Supreme Court early struggled with the definition of a watercourse. In 1891 Justice Lord set out what has become the classic definition of a watercourse in Oregon:

> A watercourse is a stream of water usually flowing in a particular direction, with well-defined banks and channels, but . . . the water need not flow continuously -- the channel may sometimes by dry; . . . the term watercourse does not include water descending from the hills, down the hollows and ravines, without any definite channel, only in times of rain and melting snow, but . . . where water, owing to the hilly or mountainous configuration of the country accumulates in large quantities from rain and melting snow, and at regular seasons descends through long, deep gullies or ravines upon the lands below, and in its onward flow carves out a distinct and well-defined channel, which even to the casual glance bears the unmistakable impress of the frequent action of running water, and through which it has flowed from time immemorial --- such a stream is to be considered a watercourse. . .[8]

D. Underground Water in Watercourses

Water flowing underground in a known and well-defined channel is not percolatin water but rather constitutes a water course and at common law is subject to the laws applicable to surface streams.[9] However, the existence of the stream must be established from the surface of the earth without benefit of excavations.[10]

The Ground Water Act of 1955 adopted a broad definition of ground water at ORS 537.515(3):

> "Ground water" means any water, except capillary moisture, beneath the land surface or beneath the bed of any stream, lake, reservoir or other body of surface water within the boundaries of this state, whatever may be the geological formation or structure in which such water stands, flows, percolates or otherwise moves.

This definition eliminates the common law distinction between percolating ground water and ground water flowing in channels and subjects all ground water (except capillary moisture) to appropriation and to the permit system and other public controls under the Ground Water Act. These provisions amount to a substantial curtailment of the landowner's rights over percolating ground water as "part and parcel of his land," i.e., his real property "bundle of rights". No constitutional challenge to these provisions has reached the appellate level in Oregon, although several challenges have been filed at the trial court level

according to informal information received from the State Engineer. This state officer would be in a more confident position to administer the Ground Water Act of 1955 if such a challenge could be decisively ruled upon by the Oregon Supreme Court.

E. Lakes or Ponds Not Connected With a Watercourse.

Lakes which are part of a watercourse are treated under the law governing watercourses.[11] Lakes not connected with watercourses may be fed by springwater, diffused surface water, or precipitation. No case involving lakes and ponds not connected with a watercourse has been appealed to the Oregon Supreme Court.

F. Spring Waters

A spring is "a place where water issues naturally from the surface of the earth."[12] It is provided by statute that the person on whose land spring water first arises shall have the right to the use of such waters.[13] But this rule is limited to those cases in which the water does not flow in a well-defined channel onto the lands of others.[14] Indeed it has been held that where a spring arose on a tract of land and flowed to a nearby river without leaving the tract it was to be considered a watercourse though it flowed only a short distance.[15]

G. Waste Waters

Waste waters are waters which have been used and allowed to escape. Excess water which is allowed to flow back into a stream is waste water and is subject to appropriation by others unless the original owner possesses an intent to reclaim the water at the time of its release.[16] However, an appropriator is entitled to recapture waste water remaining on his land and apply it to a beneficial use.[17] Indeed water "is not waste water so long as it remains upon the land of the original appropriator."[18] But note that if an appropriator uses more water than he can beneficially apply, neither he nor persons depending on the drainage of his surplus onto their land can assert any ownership or right to use the water.[19]

H. Water in Artificial Waterways

After water has been appropriated and diverted from a natural stream into an artificial conduit it becomes personal property and cannot be "appropriated" from the conduit unless the owner of the artificial conduit should consent.[20]

1. W. Hutchins, Selected Problems in the Law of Water Rights in the West 1 (1942).

2. Price v. Oregon R.R., 47 Or. 350, 358, 83 P. 843 (1906).

3. Id.

4. See separate discussion of tort liability involving surface water.

5. Barker v. Sonner, 135 Or. 75, 85, 294 P. 1053 (1931); Hayes v. Adams, 109 Or. 51, 57, 218 P. 933 (1923); Boyce v. Cupper, 37 Or. 256, 260-61, 61 P. 642 (1900). The effect of the relatively new ground water statute ORS 537.505 et seq. is separately discussed.

6. Hayes v. Adams, 109 Or. 51, 58, 218 P. 933 (1923).

7. Id.

8. Simmons v. Winters, 21 Or. 35, 41-42 (1891). Accord, Wright v. Phillips, 127 Or. 420, 272 P. 554 (1928); Hidebrandt v. Montgomery, 113 Or. 687, 691, 234 P. 267 (1925); Hansen v. Crouch, 98 Or. 141, 146, 193 P. 454 (1920); Borman v. Blackman, 60 Or. 304, 309, 118 P. 848 (1911).

9. Bull v. Siegrist, 169 Or. 180, 186, 126 P.2d 832 (1942); Hayes v. Adams, 109 Or. 51, 58, 218 P. 933 (1923).

10. Hayes v. Adams, 109 Or. 51, 58, 218 P. 933 (1923).

11. W. Hutchins, note 1 supra at 22.

12. Beisell v. Wood, 182 Or. 66, 71, 185 P.2d 570 (1947).

13. ORS sec. 537.800 (1963). The statute is interpreted as giving the landowner an exclusive right to the spring water. Skinner v. Silver, 158 Or. 81, 96, 75 P.2d 21 (1938); Klamath Development Co. v. Lewis, 136 Or. 445, 450, 299 P. 705 (1931); Henrici v. Paulson, 134 Or. 222, 293 P. 424 (1930); Morrison v. Officer, 48 Or. 569, 570, 87 P. 896 (1906).

14. Beisell v. Wood, 182 Or. 66, 71, 185 P.2d 570 (1947).

15. Fitzstephens v. Watson, 218 Or. 185, 194, 344 P.2d 221 (1959).

16. Oliver v. Skinner & Lodge, 190 Or. 423, 226 P.2d 507 (1951); Jones v. Warmsprings Irrigation Dist., 162 Or. 186, 196, 91 P.2d 542 (1939); Hutchinson v. Stricklin, 146 Or. 285, 294, 28 P.2d 225 (1933); Vaughan v. Kolb, 130 Or. 506, 516, 280 P. 518 (1929).

17. Cleaver v. Judd, 238 Or. 266, 270, 393 P.2d 193 (1964); Barker v. Sonner, 135 Or. 75, 79, 294 P. 1053 (1931).

18. Id.

19. Tyler v. Obiague, 95 Or. 57, 186 P. 579 (1920); Hill v. American Land & Livestock Co., 82 Or. 202, 209, 161 P. 403 (1916).

20. Vaughan v. Kolb, 130 Or. 506, 511, 280 P. 518 (1929); MacRae v. Small, 48 Or. 139, 144, 85 P. 503 (1906).

THE PERMIT SYSTEM AND THE APPROPRIATION DOCTRINE IN OREGON

I ACQUIRING WATER RIGHTS BY APPROPRIATION

Prior to 1891 Oregon had no statutory law respecting the appropriation of water except an 1864 statute recognizing the right of miners to obtain vested water rights in accordance with local custom.[1] In 1891,[2] 1899,[3] and 1905,[4] statutes were enacted which set forth self-help procedures for appropriating water. These enactments were largely a recognition of the custom that had grown up prior to that time. Finally in 1909 prior appropriation was made the sole method of acquiring water rights under a comprehensive Water Code and the procedures for perfecting such a right were brought under administrative control.[5] Substantially the same system has continued to this day in Oregon.[6]

A. Pre-1909 Rights

Prior to 1909, in order to constitute a valid appropriation of water, an appropriator had to do three things: (1) manifest an intent to appropriate for some beneficial use which use was existing at the time or contemplated in the future, (2) divert water from its natural channel, and (3) apply the water within a reasonable time to some useful purpose.[7]

Manifestation of Intent to Appropriate. Before enactment of the 1909 Water Code, the intent to appropriate water could be manifest in two ways. One could, without posting or recording any notice, construct a diversion works, divert water, and apply it to a beneficial use. In such cases the intent to appropriate was implicit in the diversion and application.[8] Or one could, in accord with local custom or the procedural laws of 1891, 1899, or 1905, post notice at the point of diversion and file a copy of such notice with the appropriate authorities as prescribed by the law or custom.[9] The distinction between these two methods of initiating a diversion was purely one of record. In either case no right existed until diversion and application of the water to a beneficial use were completed and, at that time, the right related back to the time diversion was commenced or

notice was made.[10] The advantage of the notice system was the facilitation of proof in the event of a dispute.

The custom of posting and recording notice of intent to divert water arose early in the water law of the West. The Oregon Supreme Court first encountered this custom in attempting to adjudicate water rights claims based on the Act of July 26, 1866.[11] In the subsequent cases, reference to local customs is often found. For example, in Cole v. Logan the court said:

> The evidence shows that on Willow Creek [a tributary of the Malheur River] there was a local custom which required the claimant to file for record with the county clerk a notice of his claim to appropriate the water of a natural stream, . . .[12]

Three years later the exact requirements of the local custom in that area were set out in more detail:

> Parties seeking to make an appropriation of water for agricultural or beneficial purposes were required to post at the point of diversion a notice containing in substance a statement of the amount of water claimed, the purpose to which it was to be applied, the names of the appropriators, the general direction of the proposed ditch, and the terminals thereof, and have the same immediately recorded in the office of the county clerk . . . of the county in which the appropriation was sought to be made.[13]

Such customs were incorporated into the 1891, 1899 and 1905 statutes.[14]

Regardless of whether one manifested his intent to appropriate by written notice or by diversion and application of the water to a beneficial use, certain requirements as to the nature of the intent had to be satisfied. The original intent of the appropriator must have contemplated that the water claimed would be

> "for use upon certain lands then definitely had in mind, and it [must have been] reasonably anticipated that when the diversion [was] ultimately completed and the water ready for application to that land, or other land or uses which [had] been substituted for the originally considered and intended land, such land [would] be then, or with reasonable diligence thereafter, ready to receive it."[15]

The purpose of custom and the procedural statutes was to establish a record of intent to appropriate and to fix a definite limitation of water use at the outset of the proposed scheme.[16] However, the notice and recording system proved nearly

valueless without administrative review. As explained by John H. Lewis, Oregon's eminent State Engineer, who was instrumental in the development of the 1909 Water Code:

> These laws [1891] were in harmony with customs of miners, . . . [But] there was no supervision by the county or State. As a result, each applicant usually claimed many times the water needed, and usually all the water in the stream at that point. The records, therefore, were of no public value, and in one case a trip of 1000 miles would have had to be made to consult all the records relating to a single stream.[17]

Eventually the technicalities of fulfilling notice requirements in the pre-1909 period were made obsolete by the section of the 1909 Water Code which preserved vested rights:

> [W]here appropriations of water heretofore attempted have been undertaken in good faith, and the work of construction and improvement thereunder has been in good faith commenced and diligently prosecuted, such appropriation shall not be set aside or avoided, in proceedings under this act because of any irregularity or insufficiency, of notice by law, or in the manner of posting, recording, or publication thereof.[18]

This section has been construed as curing any clerical defects in pre-1909 notices, but it cannot be invoked to alter the original intent of the appropriator.[19]

Diversion and Reasonable Diligence. The law allowed a reasonable time to effect diversion once notice had been accomplished.[20] What is a reasonable time was a question of fact depending on the magnitude of the undertaking and the natural obstacles to be overcome.[21] Unusual or extraordinary efforts were not required. Rather,

> [t]he appropriator . . . must exercise that degree of diligence which will indicate the constancy and steadiness of purpose and labor usual with men engaged in like enterprises, who desire speedy accomplishment of their designs, and will manifest to the world a bona fide intention to complete the work without unnecessary delay: . . .[22]

An appropriator was not required to divert all the water he ultimately needed at the initiation of his diversion.[23] Instead, he could develop his diversion works at a rate which would keep pace with his need for water if his expansion of need is in turn done with reasonable diligence.[24] Coming within the terms of this

liberal rule was important to the appropriator because it permitted him to relate his priority date for the expanded use back to the time of the initial diversion.

> It would be vain and useless to require an appropriator to construct works necessary to make the entire appropriation of water for all the land intended to be irrigated at the inception of the project when it [the land] is not in readiness to receive the same and there is no immediate purpose for which the water can be used.[25]

In some cases claimants have attempted to explain unreasonable delays on the basis of intervening circumstances. The pecuniary circumstances or ill-health of the appropriator would not excuse delay.[26] However, where a claimant was unable to obtain a right-of-way across federal lands because of "bureaucratic delays," and by expanding money and forfeiting some head for his power plant he was able to avoid this obstacle, it was held that he had exercised due diligence despite a considerable delay.[27]

Although it is usually stated that diversion is one of the necessary elements to accomplish an appropriation, in one situation this requirement was waived. Where natural flooding of a stream caused land to be irrigated, the requirement that there be a diversion was satisfied when the appropriator accepted the gift of nature and indicated his intent to reap the benefits.[28] Or as put in another case, where water naturally irrigated land, the cultivation of the land constituted an appropriation.[29]

Finally the efficiency of an appropriator's diversion works may be challenged. A finding of inefficient diversion did not defeat the water right but rather reduced the quantity of water which may be claimed under the water right.[30] Historically, inefficient means of diversion have been accepted until water shortages occurred. At such times, for example, it was held in Oregon that natural flooding of land was an inefficient method of diversion and that such appropriators must within a reasonable time develop more economical forms of diversion.[31] The question of what is an adequate diversion system has grown more complex as the need for

water has increased. For a recent case involving the right to saved water where an irrigator lined his diversion canals, see Salt River Valley Water Users' Ass'n v. Kovacovich, 3 Ariz. App. 28, 411 P.2d 201 (1966) noted at 46 Or. L. Rev. 243 (1967).

Application of Water to a Beneficial Use. Once the appropriator established the elements of intent to appropriate and diversion, he still must show he applied the water appropriated to a beneficial use.[32] However, it is not required that the total quantity of water appropriated be used at once.

> While a settler cannot appropriate more water from the public domain than is necessary to irrigate his lands, . . . yet he is not required, in order to make his appropriation valid, to beneficially use the first year of his settlement the full amount of water appropriated. . . . His original appropriation may be made with reference to the amount of water that is needed to irrigate the lands he designs to put into cultivation.[33]

But water appropriated for future needs must be actually used within a reasonable time for the purpose of the original appropriation:[34] What constitutes a reasonable time is a question of fact and depends on the circumstances of each case.[35]

B. Rights Acquired After 1909

The February 24, 1909 Water Code established an administrative system for the appropriation of water rights.[36] The system is designed to assure that the water right is limited to the extent intended by the appropriator at the time of his appropriation.[37] To accomplish this purpose, the Code requires the appropriator to (1) acquire a permit to appropriate before undertaking to use any water,[38] and (2) perfect his appropriative right by beneficial use according to the terms of the permit.[39] Once he has complied with these requirements, the appropriator is entitled to a water rights certificate as evidence of his perfected right.[40] This system is the exclusive means of acquiring an appropriative water right after February 24, 1909.[41]

Acquiring a permit to appropriate. To obtain a permit to appropriate, one must file an application containing the following information with the State Engineer:

a) name and post office address of applicant,

b) source of water supply,

c) nature and amount of proposed use,

d) location and description of diversion works,

e) time within which it is proposed to begin construction,

f) time required for completion of construction, and

g) time required for complete application of the water to the proposed use.[42]

The application must contain certain additional facts reflecting the quantity of water needed and the beneficial use to which it is to be applied.[43] Finally, the application must include any maps, drawings and data which the State Engineer may require.[44] The State Engineer requires that a map be provided with all applications, and reserves the right to require additional data in other cases.[45] Precipitation or rainfall and run-off records should be submitted whenever possible, and extensive information must be provided concerning the erection of any dam.[46]

Upon receipt of the application, the State Engineer reviews it for completeness, and may return it for additions or corrections.[47] If such additions and corrections are supplied within thirty days, the application suffers no loss in priority.[48] Properly completed applications to appropriate less than ten second-feet of water are to be approved by the State Engineer if the use contemplated is a beneficial one, is not prejudicial to the public interest, and does not conflict with existing rights.[49] Applications for larger amounts are to be approved by the State Engineer if, in addition to the above requirements, the applicant, within thirty days after being requested to do so, furnishes satisfactory proof of his ability to construct the necessary works and of his good faith intent to complete the works with due diligence.[50] The State Engineer may hold hearings, upon ten days written notice, to determine whether a proposed use will conflict with existing rights or be prejudicial to the public interest.[51]

"If, in the judgment of the State Engineer, the proposed use may prejudicially affect the public interest, or is to develop hydroelectric power in excess of 100 theoretical horsepower," he must refer the application to the State Water Resources Board.[52] The Board is required to hold a public hearing and approve, modify, or reject the application on the basis of public interest.[53] If the Board finds that the proposed use would not be detrimental to the public interest, it must approve the application.[54] The Board's determination of public interest is to be made with due regard to (1) conserving water for highest uses, (2) maximum economic development of the waters involved, (3) control of waters for all beneficial uses, (4) amount of water available, (5) prevention of wasteful uses of water, (6) vested and inchoate rights to water, and (7) state water resources policy.[55]

The general statutory approach is that the application for a permit to appropriate water shall be approved. The State Engineer can reject a properly completed application only if he finds (1) that the proposed use would conflict with existing rights, or (2) that the proposed use does not contemplate the application of water to a beneficial purpose, or (3) in the case of an application for an excess of ten second-feet, that the applicant has failed to furnish satisfactory proof of his ability to construct the proposed works, or of his intention in good faith to construct them with due diligence.[56] The State Water Resources Board can reject an application only if the application is referred to it by the State Engineer and the Board finds after a public hearing that the proposed use would be detrimental to the public interest.[57] Orders of the State Engineer or the Board may be appealed to the circuit court (of the county in which at least part of the water proposed to be used is located) by the applicant, or by any objector appearing before the State Engineer or the Board in respect to the application.[58] The appeal is treated as a suit in equity, and appeal may be taken from the final order or decree of the circuit court to the Oregon Supreme Court.[59]

The approval or rejection of an application is to be indorsed thereon and a record made of it in the State Engineer's office.[60] The indorsed application is to be mailed immediately to the applicant, and he may proceed with construction of the necessary works if the application is approved.[61] If the application is rejected, the applicant is barred from proceeding so long as the rejection continues in force.[62] The applicant can assign his permit to another, subject to the conditions on the permit, but such assignment is binding only on the parties to the assignment unless it is filed for record in the State Engineer's office.[63]

Perfecting the Appropriation. Once a permit to appropriate is obtained, the applicant must accomplish his plan for water use within prescribed time limits in order to perfect his appropriative right. Most applicants must begin construction within one year from the date of approval of the application.[64] The construction must be completed within a reasonable time as specified in the permit, but not to exceed five years.[65] The State Engineer may in his discretion extend the time allowed, even if such extension exceeds the five-year limit.[66]

There are two exceptions to the above rules. First, where a permit from the Federal Power Commission is required in connection with the development of the applicant's proposed project, the applicant must make application for the federal permit within six months (10 years if applicant is a municipality) from the date of filing of his application with the State Engineer.[67] Thereafter, the applicant need comply with the time limits set by the Federal Power Commission only.[68]

Second, applications by municipal corporations for municipal uses or purposes are exempt from the above requirements and such applications may be approved by the State Engineer to the exclusion of all subsequent appropriations.[69]

Subject to the above exceptions, the State Engineer can cancel a permit if the appropriation is not completed within the prescribed time limit.[70] The owner of the permit has three months beyond the deadline to show proof of completion, and the State Engineer must give a sixty-day notice of cancellation by registered mail.[71]

The Water Rights Certificate. When an appropriation is satisfactorily complet in accordance with the terms of the water code (including application of the water to a beneficial use), the State Engineer issues a water rights certificate -- a paper title to the right to use water.[72] The certificate sets forth "the name and post office address of the owner of the right; the priority of the date [sic], extent and purpose of the right, and if the water is for irrigation purposes, a description of the legal subdivision of land to which the water is appurtenant."[73] The certificate is recorded by the State Engineer and transmitted to the county clerk of the county in which the right is located.[74] The latter, upon payment of a one dollar fee, records the right and transmits it to the owner.[75] After three months from the date of issue, the water rights certificate becomes conclusive evidence of priority and extent of appropriation against all subsequent appropriators, except where the right is abandoned subsequent to the issuance of the certificate.[76]

1. Act of Oct. 24, 1864, sec. 2, Hill's Annotated Laws of Or., sec. 3833 (1877).

2. Or. Laws 1891, p. 52.

3. Or. Laws 1899, p. 172.

4. Or. Laws 1905, ch. 228.

5. Or. Laws 1909, ch. 216.

6. ORS ch. 537 (1963).

7. Hutchinson v. Stricklin, 146 Or. 285, 297, 28 P.2d 225 (1933); In re Water Rights of Deschutes River, 134 Or. 623, 633, 286 P. 563 (1929), 294 P. 1049 (1930); In re Rights to Use of Water of Silvies River, 115 Or. 27, 65, 237 P. 322 (1925); Nevada Ditch Co. v. Bennett, 30 Or. 59, 87, 45 P. 472 (1896); Low v. Rizor, 25 Or. 551, 557, 37 P. 82 (1894). One asserting right by prior appropriation had the burden of proving satisfaction of all the requisite elements of that appropriation. Gardner v. Wright, 49 Or. 609, 632, 91 P. 286 (1907).

8. State v. Peoples West Coast Hydroelectric Corp., 129 Or. 475, 481, 278 P. 583 (1929).

9. Ibid.

10. Ison v. Sturgill, 57 Or. 109, 114, 109 P. 579, 110 P. 535 (1910).

11. Lewis v. McClure, 8 Or. 273 (1880). The statute referred to is the Act of July 26, 1866, 14 Stat. 251.

12. 24 Or. 304, 309, 33 P. 568 (1893).

13. Nevada Ditch Co. v. Bennett, 30 Or. 59, 85, 45 P. 472 (1896). Other cases in which reference is made to posting of notice prior to the 1891 statute include Laurance v. Brown, 94 Or. 387, 389, 185 P. 161 (1919); Bowen v. Spaulding, 63 Or. 392, 395, 128 P. 37 (1912); Ison v. Sturgill, 57 Or. 109, 109 P. 579, 110 P. 535 (1910); North Powder Milling Co. v. Coughanour, 34 Or. 9, 11, 54 P. 223 (1898), and Smith v. Neal, 31 Or. 105, 49 P. 850 (1897).

14. Re Determination of Water Rights of Hood River, 114 Or. 112, 143, 227 P. 1065 (1924). The statutes enumerate the elements of the appropriation which must be stated in the notice.

15. Id. at 137-38; cf. In re Water Rights of Silvies River, 115 Or. 27, 65, 237 P. 322 (1925). In the earlier cases the evidence of intent was often construed in favor of the appropriator. See, e.g., Seaward v. Pacific Livestock Co., 49 Or. 157, 88 P. 963 (1907), where the court said that when the owner or possessor of land appropriates water for irrigation and all his land can be benefited thereby, and the volume of the stream is sufficient for such irrigation, "it is reasonable to suppose" that he intends to reclaim the entire area of his land. By way of contrast in In re Rights to Use of Waters of Silvies River, 115 Or. 27, 237 P. 322 (1925), the court said that the claimant could not assert its rights under a notice filed with the appropriate

authorities because it failed to show "that the several notices of water location relied upon by it were posted in conformity to custom prevailing during the eighties, and we find no testimony that the notices were posted in any manner." Id. at 40.

16. In re Waters of Umatilla River, 88 Or. 376, 380, 168 P. 922 (1917), 172 P. 97 (1918).

17. J. Lewis, State and National Water Laws 644 (1913).

18. Or. Laws 1909, ch. 216, sec. 70(7).

19. In re Waters of Umatilla River, 88 Or. 376, 392, 168 P. 922 (1917), 172 P. 97 (1918); In re Willow Creek, 74 Or. 592, 633, 144 P. 505 (1914), 146 P. 475 (1915).

20. Seaward v. Pacific Livestock Co., 49 Or. 157, 161, 88 P. 963 (1907).

21. Id. In re Rights to Use of Waters of Silvies River, 115 Or. 27, 61, 237 P. 32 (1925); Oviatt v. Big Four Mining Co., 39 Or. 118, 127, 65 P. 811 (1901). In at least two cases, diversions taking over seven years to complete were not considered to have taken an unreasonable amount of time. In 1927 the Oregon Supreme Court upheld the State Engineer's decision that one who failed for seven years to complete a two and one-half mile diversion canal because it would cost $6000 to build a necessary flume across an intervening river had completed his works within a reasonable time and with due diligence by attachi his flume to a city bridge built across the river in the sixth year. In re Determination of Water Rights of Owyhee River, 124 Or. 44, 52, 259 P. 292 (192

In 1929 a water right based on a 1900 notice was upheld even though the full capacity of the diversion was not effected until 1912. Progress on the origina diversion works had been steady until 1905, and these works had subsequently been replaced by a more permanent system completed in 1912. In re Water Rights of Deschutes River, 134 Or. 623, 644, 286 P. 563 (1929), 294 P. 1049 (1930).

To be contrasted with these cases is an 1894 case in which defendant's failure to expand his use of water for a thirteen-year period was held to constitute an abandonment of any claim to additional water. Low v. Rizor, 25 Or. 551, 557, 37 P. 82 (1894). It was not the time period, but rather what was being done during the time period to complete the project which was critical in these decisions.

22. Seaward v. Pacific Livestock Co., 49 Or. 147, 161, 88 P. 963 (1907). Accord, Re Determination of Water Rights of Hood River, 114 Or. 112, 131, 227 P. 1065 (1924); Pringle Falls Power Co. v. Patterson, 65 Or. 474, 485, 128 P. 820 (1912), 132 P. 527 (1913).

23. Cole v. Logan, 24 Or. 304, 311, 33 P. 568 (1893).

24. Tudor v. Jaca, 178 Or. 126, 137, 164 P.2d 680 (1945), 165 P.2d 770 (1946); Re Determination of Water Rights of Hood River, 114 Or. 112, 137, 227 P. 1065 (1924); Cole v. Logan, 24 Or. 304, 311, 33 P. 568 (1893). Where the claimant equipped and operated his water-powered mill rapidly enough to keep pace with local grain production, proper diligence was shown; it would have been futile to develop the mill any more rapidly. In re Rights to Use of Waters of Silvies River, 115 Or. 27, 60, 237 P. 322 (1925).

25. Re Determination of Water Rights of Hood River, 114 Or. 112, 133, 227 P. 1065 (1924).

26. Cole v. Logan, 24 Or. 304, 309, 33 P. 568 (1893).

27. Pringle Falls Power Co. v. Patterson, 65 Or. 474, 487, 132 P. 527 (1913).

28. Masterson v. Pacific Live Stock Co., 144 Or. 396, 408, 24 P.2d 1046 (1933); In re Rights to Use of Waters of Silvies River, 115 Or. 27, 66, 237 P. 322 (1925).

29. McCall v. Porter, 42 Or. 49, 55, 70 P. 820, 71 P. 976 (1902).

30. Oliver v. Skinner and Lodge, 190 Or. 423, 436, 226 P.2d 816 (1953); In re Willow Creek, 74 Or. 592, 621, 647, 144 P. 505 (1914), 146 P. 475 (1915).

31. In re Right to Use of Waters of Silvies River, 115 Or. 27, 44, 66, 237 P. 322 (1925).

32. In re Determination of Water Rights of Willow Creek, 119 Or. 155, 200, 236 P. 487, 237 P. 682, 239 P. 123 (1925).

33. Simmons v. Winters, 21 Or. 35, 43 (1891). Accord, In re Rights to Use of Waters of Silvies River, 115 Or. 27, 87, 237 P. 322 (1925).

34. Hindman v. Rizor, 21 Or. 112, 120 (1891).

35. Blanchard v. Hartley, 111 Or. 308, 314, 226 P. 436 (1924); Wimer v. Simmons, 27 Or. 1, 39 P. 6 (1895); Hindman v. Rizor, 29 Or. 112, 120 (1891). An early case held that failure to expand cultivation for a five-year period, in the absence of explanation, constituted an unreasonable delay. The amount of the appropriation was thus limited to the land actually irrigated during the five-year period. Seaward v. Pacific Livestock Co., 49 Or. 157, 161, 88 P. 963 (1907).

36. Or. Laws 1909, c. 216 (now Or. Rev. Stat. secs. 536.050 to .070 [1965], 537.120, 537.130, 537.140 to .250, 537.280 to .300 [1963], 538.240, 538.410, 538.420 [1965], 539.010 to .220 [1955], 540.010 to .130, 540.210 to .230, 540.310 to .430, 540.510 to .530, and 540.710 to .750 [1963]).

37. Oliver v. Skinner Lodge, 190 Or. 423, 437, 226 P.2d 507 (1951); Cookinham v. Lewis, 58 Or. 484, 491, 114 P. 88, 115 P. 342 (1911).

38. ORS 537.130 (1963).

39. ORS 537.230, 537.240 (1963).

40. ORS 537.250 (1963).

41. ORS 537.120 (1963). The case law suggests a doubt on this point. In Tudor v. Jaca, 178 Or. 126, 152, 164 P.2d 680 (1945), the court said "[i]t is a debatable question, under the Water Code, whether subsequent to 1909, an appropriation of water can be initiated by adverse use, or in any other manner than under the statutory procedure."

42. ORS 537.140(1)(a)(1963); Or. Ad. Rules 20-010 (1959). Application forms are provided by the State Engineer.

43. ORS 537.140(1)(b) to (f) (1963). An irrigator must specify the subdivision of land and the acreage to be irrigated. Appropriators for power purposes must specify the head and the amount of water to be utilized, and the uses to which the power is to be applied. (See Or. Ad. Rules 60-005 to 60-135 [1962] on appropriation of water for hydro-electric power purposes.) If the appropriation is for a reservoir, the height of the dam, the capacity of the reservoir, and the uses to be made of the impounded waters must be specified. Appropriators for municipal water supply must specify the present population, and estimated future requirements of the city. And miners must state the nature of the mines to be served, and the methods of supplying and using the water.

44. ORS 537.140(2) (1963).

45. Or. Ad. Rules 20-020, 20-080 (1959).

46. Or. Ad. Rules 20-060 to 20-080 (1959). See also Or. Ad. Rules 20.010, item 6 (1959).

47. ORS 537.150 (1963).

48. Ibid.

49. ORS 537.160, 537.170 (1963). Except "[n]o application for a permit to appropriate waste or seepage water, which is to be carried through an existing ditch or canal not owned wholly by the applicant, shall be approved until the applicant has filed with the engineer an agreement between the applicant and the owner of the ditch or canal, authorizing its use by the applicant to carry the water." ORS 537.160(2) (1963).

50. ORS 537.160(3) (1963). But all applications to develop hydroelectric power in excess of 100 theoretical horsepower must be referred to the State Water Resources Board. ORS 537.170(1) (1963).

51. ORS 537.180 (1963).

52. ORS 537.170(1) (1963). See Or. Ad. Rules 60-005 to 60-135 (1962) on appropriation of water for hydroelectric power projects.

53. ORS 537.170, 537.190 (1963).

54. ORS 537.170(2) (1963).

55. ORS 537.170(3) (1963).

56. ORS 537.160 (1963). There is an additional condition with respect to waste or seepage water as discussed in note 49, supra.

57. ORS 537.170 (1963).

58. ORS 537.200 (1963). In Cookinham v. Lewis, 58 Or. 484, 114 P. 88, 115 P. 342 (1911), the court stated that where the party intended to use water on state

lands, but had no contract with the state to service such lands, the state had power to deny a reservoir permit on the grounds it would be detrimental to the welfare of the public. The language of the statute has been broadened since this decision, making it even clearer that the State Water Resources Board has such power.

59. ORS 537.200 (1963).

60. ORS 537.210 (1963).

61. Id.

62. Id.

63. ORS 537.220 (1963).

64. ORS 537.230(1). The one year period is mandatory and the State Engineer has no power to extend it. Morse v. Gold Beach Water, Light and Power Co., 160 Or. 301, 305, 84 P.2d 113 (1938). The construction begun within the one year period must be substantial enough to manifest good faith and the intent to exercise reasonable diligence in the completion of the project. Id. at 306. Upon the commencement of work, notice must be sent to the State Engineer. Or. Ad. Rules 20-040 (1959).

65. ORS 537.230(1) (1963). The State Engineer must be notified when the construction is completed and also when the water has been applied to a beneficial use. Or. Ad. Rules 20-040 (1959).

66. ORS 537.230(2) (1963). The courts will seldom disturb the discretionary act of the State Engineer in granting or refusing to grant an extension of time. See Smyth v. Jenkins, 208 Or. 92, 299 P.2d 819 (1956); Broughton's Estate v. Central Oregon Irrigation Dist., 165 Or. 435, 101 P.2d 425, 108 P.2d 276 (1940); In re White River, 155 Or. 148, 62 P.2d 22 (1936). In Smyth it was held that because the State Engineer could grant an extension of time, he had the authority to waive the requirement that the applicant request such extension.

67. ORS 537.240(1), (2) (1963).

68. ORS 537.240(3), (4) (1963). After Federal Power Comm'n v. Oregon, 349 U.S. 435 (1955), commonly known as the Pelton Dam decision, it appears unlikely that the state has any power to veto a permit issued by the FPC within its jurisdiction.

69. ORS 537.190(2), 537.230(1) (1963).

70. ORS 537.260 (1963).

71. Id.

72. ORS 537.250 (1963).

73. ORS 537.250 (1963), 539.140 (1955).

74. Id.

75. Id.

76. ORS 537.270 (1963). Cleaver v. Judd, 238 Or. 266, 393 P.2d 193 (1964) made it clear that the water certificate is conclusive only against persons with a later priority.

II PARAMETERS OF THE APPROPRIATION RIGHT

Six factors are used to define an appropriative water right: (1) priority date, (2) quantity, (3) place of use, (4) period of use, (5) nature of use, and (6) point of diversion.[1] The nature and effect of these several factors is discussed below. Most of the discussion concerns agricultural uses of water, because it is these uses which have figured prominently in the case law. However, the same principles apply to other types of use.

A. Priority Date

The priority date of a water right is crucial, because under the appropriation system the holder of a water right is superior in times of shortage to all subsequent appropriators and subordinate to all prior appropriators.[2] The holder of the senior right is protected not only against subsequent appropriations on the stream from which he appropriates, but also against subsequent appropriations on upstream tributaries.[3]

The general rule as to pre-1909 appropriations is that the priority date of a water right, acquired and perfected with due diligence, relates back to the first step taken.[4] Where proper notice is used under custom or early procedural statutes, the first step taken is said to be the posting of the notice.[5] Where appropriation is accomplished without notice, the first step taken is the commencement of the water diversion project.[6] Where no diversion is necessary, i.e., where the land is naturally overflowed, the first step taken is the bona fide effort to use both the lands and the water for beneficial purposes.[7]

Priority dates are ultimately dependent on completion of the diversion with due diligence. Where there is an unreasonable delay in completing a diversion, the delay will prevent the priority date from relating back.[8] Failure to satisfy some of the other elements of the appropriative right may also cause the right not to relate back. For example, where the evidence indicated no intent to use water on the land until the time it was actually applied to the land, the priority date

was fixed as the date of application.[9]

B. Quantity of Water

An appropriator is entitled under early case law to a certain maximum quantity of water even if the use is to the detriment of subsequent appropriators, but only to the extent needed for the beneficial use for which it is appropriated.[10] At any given time the appropriator may be visualized as having two quantitative rights in water -- (1) a maximum quantity based on the extent of his appropriation, and (2) an equal or lesser quantity based on his current "need." He is entitled to use only the latter quantity,[11] but his priority right extends to the full amount of the former quantity whenever he "needs" it for the purpose for which it was originally appropriated. A single appropriator may hold several water rights with differing priorities. In such a case, a quantity limitation is fixed for each priority right.

C. Units of Measure

Water may be measured either as a fixed volume or in terms of a rate of flow -- a volume of water per unit of time. The acre-foot is the most popular unit of volume. One acre-foot of water will cover one acre of land one foot deep. The most popular unit for measuring rate of flow is the second-foot. It is equivalent to one cubic foot of water per second of flow or 1.98 acre-feet per day in terms of volume. The second-foot has replaced the miner's inch which was the popular unit for measuring rate of flow during the early development of the West.

A miner's inch represents the quantity of water which will flow through a one-inch square orifice under some designated or presumed pressure. The difficulty with the miner's inch as a measurement of flow is that the true amount of flow varies depending on the head of water under which it is measured. If the flow is measured under the pressure created by a six-inch head of water, one miner's inch equals approximately one and one-half cubic feet per minute or 1/40 of a second-foot.

When reading the early Oregon cases which use the miner's inch as the standard unit of measurement, one can generally assume that a miner's inch is roughly equal to 1/40 of a second-foot unless something other than a six-inch pressure is indicated.[12]

D. Rules for Measuring

The quantity of the appropriation under early case law depends on three factors: (1) the amount diverted, (2) the amount used, and (3) the amount needed.[13] Once an appropriation is fully perfected, the quantity of the appropriation in terms of legal theory is limited to the lowest of these three factors.[14] Thus, one quickly ascertainable limit on the quantity of an appropriation is the maximum capacity of the diversion works (i.e., the maximum amount which could have been diverted).[14a] But usually this capacity will not be the smallest of the three factors. The actual amount diverted and the actual amount used are much more difficult to prove, and depend largely on the testimony of witnesses and circumstantial evidence. The third factor, the amount "needed", surprisingly, has been reduced to a relative known rate of flow or volume, at least with respect to irrigation uses. This is accomplished by use of standardized figures called the duty of water.

The duty of water is a ratio expressing the amount of water necessary to produce a desired benefit. The duty of water for irrigation depends upon the character of the soil, the manner of application, and the climate, as well as other factors.[15] From these factors, it is determined what quantity of water is necessary to raise the desired crop.[16] This determination is then expressed in terms of a quantity of water per acre.

The duty of water fixed in the Oregon cases has almost never exceeded one miner's inch or 1/40 of a second-foot per acre and was frequently fixed as low as 1/80 of a second-foot per acre.[17]

Occasionally a court has fixed a single quantity of water for an irrigation

season -- usually one to three acre-feet per acre measured in terms of volume.[18] The difficulty with this approach is that it does not resolve the day to day division of the water between appropriators. On the other hand it may more realistically express crop needs, because crops do not necessarily require a steady flow of water, but larger quantities at periodic intervals. If the disputing water users can resolve the intervals when each shall divert the water, this approach of volume entitlement may work best. Where the water supply varies severely, the court may make seasonal adjustments in its decree. For example, in one instance the Oregon Supreme Court decreed that the user should be entitled to 1/40 of a second-foot per acre until May 1 and 1/80 of a second-foot thereafter, but the total was not to exceed 3 acre-feet during the whole irrigation season.[19]

E. The Concept of Need

Economists tell us that "need" is a relative term highly dependent on the cost of the benefit which we "need." Yet, water law cases rely on "need" to define the extent of an appropriation as if it were a fixed quantity. The courts have been able to live with this fiction by focusing not on "need" but rather on "waste".[20] Diversion systems which leaked badly were not "wasteful" when the first crude systems were constructed, but today a relatively efficient water system is expected. However, the Oregon Supreme Court has not said that the appropriator's water right has been reduced. Rather it states that he was never entitled to more than he "needed" and any water which was at first wastefully used was never his as of right, but only by way of privilege.[22]

This explanation may break down if the court is asked to reduce a water right the quantity of which has previously been decreed in an adjudication. However, as methods of diversion and irrigation become more efficient, the amount "needed" and not the quantity previously decreed should be the utmost quantity to which one is entitled. Decreed water rights are expressly or impliedly limited to that amount.[23] On the other hand, the amount to which one is entitled cannot exceed the

amount decreed, regardless of any increased "need."[24]

F. Place of Use

An appropriation is appurtenant to the tract of land on which it is used, and it cannot lawfully be used on another tract, even though owned by the same person, without following the statutory procedures for transfer.[25] Thus, even if one is awarded an excessive amount of water by decree, it is of no legal use to him. He cannot legally apply the surplus to other land.[26] However, as long as the water right is used beneficially, it does not matter whether it is spread out over the entire tract to which it is appurtenant or only a part thereof.[27] Also, the Oregon Supreme Court has recognized that minor changes in place of use must inevitably occur.

> Appropriators of water with old established rights dating back to a settlement in the early seventies should be allowed a reasonable latitude for a change of cultivation of the land and rotation of crops, in order that more remunerative products may be raised, at the same time keeping the amount of water to be used within the limit of the quantity heretofore applied on the land to a beneficial use.[28]

G. Period of Use

Because different appropriators may use the same water supply during different periods of the year, it is necessary to identify the period of time to which one's appropriative right attaches.[29] An appropriative right used during only one period of the year may not subsequently be expanded to other seasons of the year.[30] By the same token, a right to use water beneficially during a certain period of the year, may not be taken by a junior appropriator regardless of how critical his need is during that same period.[31]

The right to water during certain periods, however, does not bar the state from requiring the water be used on a rotational basis among the various users, so long as the "needs" of prior appropriators are satisfied before junior appropriators.[32] Rotation introduces a desired flexibility into the law of prior appropriation and enhances the benefits to be derived from a short supply of water.

H. Nature of Use

An appropriative right is exercisable only for the purpose for which the appropriation was effected, unless a change in the nature of the use is specially authorized pursuant to statutory procedure.[33]

I. Point of Diversion

Finally, the water right may be exercised only by diverting the water at the originally established point of diversion, unless a change in the point of diversion has been authorized by the State Engineer pursuant to statutory procedure. Changes in the place of use, nature of use or point of diversion are prohibited under the statutory test if injury will thereby result to existing water rights.[34]

1. Tudor v. Jaca, 178 Or. 126, 143, 164 P.2d 680 (1945), 165 P.2d 770 (1946).

2. McCall v. Porter, 42 Or. 49, 57, 70 P. 820, 71 P. 976 (1902).

3. Low v. Rizor, 25 Or. 551, 559, 37 P. 82 (1894).

4. In re Rights to Use of Waters of Silvies River, 115 Or. 27, 237 P. 322 (1925).

5. This is clearly the rule where notices were required by early statute. Re Determination of Water Rights of Hood River, 114 Or. 112, 130, 136, 227 P. 1065 (1924). Earlier notices posted in conformance with custom only, may or may not have established a priority date. Nevada Ditch Co. v. Bennett, 30 Or. 59, 86, 45 P. 472 (1896).

6. Morgan v. Shaw, 47 Or. 333, 336, 83 P. 534 (1906); Cole v. Logan, 24 Or. 304, 308, 33 P. 568 (1893).

7. Campbell v. Walker, 137 Or. 375, 382, 2 P.2d 912 (1931).

8. Nevada Ditch Co. v. Bennett, 30 Or. 59, 86, 45 P. 472 (1896).

9. In re Willow Creek, 74 Or. 592, 650, 144 P. 505, (1914), 146 P. 475 (1915).

10. Broughton v. Stricklin, 146 Or. 259, 277, 28 P.2d 219 (1933), 30 P.2d 332 (1934).

11. Dry Gulch Ditch Co. v. Hutton, 170 Or. 656, 675, 133 P.2d 601 (1943); Broughton v. Stricklin, 146 Or. 259, 272-73, 28 P.2d 219 (1933), 30 P.2d 332 (1934); In re North Powder River, 75 Or. 83, 90, 144 P. 485 (1914), 146 P. 475 (1915).

12. In Hough v. Porter, 51 Or. 318, 417, 95 P. 732 (1908), 98 P. 1083 (1909). The miner's inch was computed on the basis of 40 inches to one second-foot. In Glaze v. Frost, 44 Or. 29, 33-34, 74 P. 336 (1903), because of the great quantity of water awarded below (2-1/2 miner's inch per acre), the court assumed that the water was to be measured at a four-inch rather than a six-inch pressure.

13. Hedges v. Riddle, 63 Or. 257, 260, 127 P. 548 (1912).

14. Id. The three factors are commonly lumped together and referred to as the amount beneficially used. The term is an equivalent for the lowest of the three factors and is a convenient short-hand expression. However, the term is not used in the immediate discussion because one cannot tell which of the three factors is the limiting one when "beneficial use" is the measure.

14a. Whited v. Cavin, 55 Or. 98, 107, 105 P. 396 (1909).

15. Little Walla Walla Irrigation Co. v. Finis Irrigation Co., 62 Or. 348, 351, 124 P. 666, 125 P. 270 (1912); Hough v. Porter, 51 Or. 318, 417, 95 P. 732 (1908), 98 P. 1083 (1909). On two occasions the court was led to comment on the failure of the parties to introduce adequate evidence of the various factors so that a duty of water could be fixed. Porter v. Pettengill, 57 Or. 247, 110 P. 393 (1910); Whited v. Cavin, 55 Or. 98, 109, 105 P. 396 (1909).

16. The crop desired must be a suitable one to the area. Donnelly v. Cuhna, 61 Or. 72, 76, 119 P. 331 (1911).

17. In re Water Rights of Deschutes River, 134 Or. 623, 635, 286 P. 563 (1929), 294 P. 1049 (1930) (one second-foot per 100 acres); In re North Powder River, 75 Or. 83, 96-97, 144 P. 485 (1914), 146 P. 475 (1915) (1 miner's inch per acre); Hough v. Porter, 51 Or. 318, 418, 95 P. 732 (1908), 98 P. 1083 (1909) (1/3 to 2/3 miner's inch per acre); Nevada Ditch Co. v. Bennett, 30 Or. 59, 101, 45 P. 472 (1896) (one miner's inch per acre).

18. Foster v. Foster, 107 Or. 355, 363, 213 P. 895 (1923) (3 acre-feet per acre); In re North Powder River, 75 Or. 83, 96-97, 144 P. 485 (1914), 146 P. 475 (1915) (2-1/2 acre-feet per acre).

19. In re Willow Creek, 74 Or. 592, 628-29, 144 P. 505 (1914), 146 P. 475 (1915).

20. "An extravagant and wasteful application of water, even though a useful project or the employment of water in an unbeneficial enterprise, is not included in the term 'use' as contemplated by the law of waters:" In re Water Rights of Deschutes River, 134 Or. 623, 665, 286 P. 563 (1929), 294 P. 1049 (1930).

21. In Foster v. Foster, 107 Or. 291, 213 P. 895 (1923), the court acknowledged the relevance of technological development in defining "need" and "waste" by remarking, "[w]e have not arrived at the stage of irrigation when farmers can practically lay iron water-pipes, or construct concrete ditches; yet the question that water for irrigation must be used economically and without needle waste is no longer debatable. Public necessity demands such use and conservati of the public waters of the state." Id. at 363. Cf. Broughton v. Stricklin, 146 Or. 259, 275, 30 P.2d 332 (1934); Joseph Milling Co. v. Joseph, 74 Or. 296, 304, 144 P. 465 (1914).

22. Tudor v. Jaca, 178 Or. 126, 143, 164 P.2d 680 (1945), 165 P.2d 770 (1946).

23. Claypool v. O'Neil, 65 Or. 511, 514, 133 P. 349 (1913).

24. In re Determination of Water Rights of Willow Creek, 119 Or. 155, 188, 236 P. 487, 237 P. 682, 239 P. 123 (1925).

25. Sears v. Orchards Water Co., 115 Or. 291, 298, 236 P. 502, 237 P. 1118 (1925).

26. Squaw Creek Irrigation Dist. v. Mamero, 107 Or. 291, 300, 214 P. 889 (1923).

27. Sears v. Orchards Water Co., 115 Or. 291, 298, 236 P. 502, 237 P. 1118 (1925).

28. Foster v. Foster, 107 Or. 355, 363, 213 P. 895 (1923).

29. See e.g., Mattis v. Hosmer, 37 Or. 523, 62 P. 17 (1900) in which the court said, "[t]he use of water for irrigation is not necessarily incompatible with the use thereof for mining, for the growth of plants in the arid region is stimulated by the application of water in the spring and summer to the soil which produces them, while the separation of gold from the baser material in wh it is imbedded, by means of water secured from small streams, is usually accomplished with better results when prosecuted in the rainy or winter season; and, this being so, the agriculturist and the miner might own and enjoy separate uses of water from the same stream without interfering with each other rights." Id. at 529.

30. Oliver v. Skinner and Lodge, 190 Or. 423, 436, 226 P.2d 507 (1951); Davis v. Chamberlain, 51 Or. 304, 314, 98 P. 154 (1908).

31. In re Waters of Rogue River, 102 Or. 60, 64, 201 P. 724 (1921).

32. In re North Powder River, 75 Or. 83, 96, 144 P. 485 (1914), 146 P. 475 (1915); McCoy v. Huntley, 60 Or. 372, 119 P. 481 (1911).

33. ORS 540.510 et seq. (1967).

34. ORS 540.530 (1967).

III TRANSFERRING PERFECTED APPROPRIATIVE WATER RIGHTS

When an appropriator of a perfected water right attempts to alter the use of that right for his own benefit of for purposes of sale, there is a risk that other water rights dependent on the same water course will be harmed. Change in the return flow pattern after a transfer is a common cause of harm or prejudice to downstream rights. It was decided early in Oregon case law that an appropriator could sell his water right to another to use for an entirely separate and distinct purpose[1] or the appropriator could himself change the character or place of use of his water or its point of diversion only if the transfer can be accomplished without impairing the water rights of others.[2]

A. Abuses at Common Law

The above rule which was widely adopted in the prior appropriation states[3] was subject to abuse in two ways. First, persons desiring to change their method or plac of use often did so without regard to the effect on others.[4] This put injured parties in the position of having to initiate litigation and prove their injury. Second, it was common to misconceive the nature of the appropriative right. The quantity of water to which one is entitled is limited to the amount which can be beneficially used on the land for which it is appropriated. But some appropriators, typically irrigators, came to think of themselves as entitled to a fixed quantity of water. If all of that quantity was not needed on the land for which it was appropriated, they sought to apply the "surplus" to other lands on the theory that this was merely a permissible addition in the place of use. But this was in fact a new appropriation. It could be considered a change in the place of use only if the appropriator were to forego use of the water on the original tract for which it was appropriated. The courts so held.[5]

B. Administrative Solution

To alleviate abuses and to provide for administrative control of transfers, Oregon adopted as part of the 1909 Water Code a declaration that all waters used in

the state for irrigation were appurtenant to the land irrigated,

> provided, that if for any reason it should at any time become impracticable to beneficially or economically use water for the irrigation of any land to which the water is appurtenant, said right may be severed from said land, and simultaneously transferred, and become appurtenant to other land, without losing priority of right theretofore established, if such change can be made without detriment to existing rights, on the approval of an application of the owners to the Board of Control.[6]

The effect of the statute was to retain the case law rule allowing transfers which could be accomplished without detriment, while placing the protection of the rights of others under administrative control.[7] In 1927 the language of the statute was broadened to apply to all waters used for any purpose.[8]

Under the statutory procedure an owner who desires to change the place of use or nature of use or point of diversion of his water right must file an application with the State Engineer.[9] The State Engineer is then required to give notice by publication.[10] Objections to the transfer or change may then be filed.[11] If no objections are received, the State Engineer may approve the change or transfer without a hearing.[12] If objections are filed, a hearing is held.[13] The State Engineer must approve the application if he finds the proposed change can be effected without injury to existing rights.[14] The office of the State Engineer has received an increasing number of applications for transfer in recent years.[15] The great majority of these applications were approved.[16]

In In re Willow Creek[17] the Supreme Court of Oregon concluded a primary purpose of the administrative review was to preserve the record title of the water rights involved, and that the application for change should be approved where rights of others are not harmed. Strict compliance with the statute is considered a condition precedent to a lawful change[18] and other water users are entitled to enjoin a change simply because it was undertaken without the permission of the State Engineer.[19] The latter rule is rationalized on the ground that under the administrative procedure the burden of proving a lack of interference with the rights of others is on the party seeking the change. To allow the latter to shift the burden of proof by

changing his use without permission would thwart the legislative intent.[20]

C. What Constitutes Impairment of the Rights of Others?

An appropriator who is authorized by the State Engineer to change his point of diversion, character of use or place of use loses no priority.[21] In authorizing a change, it is not enough for the State Engineer to determine that there is no immediate injury to others. Because of retention of priority by the transferred right, he must test the effect of the change in the light of conceivable adverse condition which might occur in the future. In a recent article, Professors Trelease and Lee have catalogued the changes which courts in appropriation states have held to constitute impairment of the rights of others.[22] There are no Oregon Supreme Court cases in which the ruling of the State Engineer on a transfer has been challenged. In determining what constitutes an impairment of the rights of others, the State Engineer would apply what early case law guidance does exist in Oregon.

D. Transfers of Water Rights

Changes in point of diversion. A senior appropriator cannot change his diversi point from below a junior appropriator's diversion point to above that point if (1) the junior appropriator's use is non-consumptive[23] or (2) part of the senior appropriator's downstream water supply is created by return flow from the junior appropriator's use or from water sources between the two diversion points (e.g., springs or tributaries to the stream). The junior appropriator would most likely be injured in either case. Similarly, no upstream appropriator can change his point of diversion downstream if intervening appropriators are relying on the return flow from the upstream use. An upstream diverter cannot change his point of diversion far downstream if losses of water in transit or by return flows would deprive intervening users of water. A prior appropriator whose use of water is non-consumptive cannot move his diversion point upstream if downstream appropriators would thereby be deprived of his return flow (e.g., by intervening

appropriators with higher priority than the downstream appropriators).[24]

Changes in character of use. When a senior appropriator changes his use from a non-consumptive to a consumptive nature, it is likely detrimental to downstream appropriators, but can have no effect upon upstream appropriators. A change from a direct flow right to a storage right conceivably could be harmful to downstream appropriators if increases in evaporation were to occur.

Changes in place of use. An appropriator may not change the place of use of his water if others are depending on the return flow from that use.[25] For example, an upstream appropriator cannot divert water outside the watershed if he had previously used the water to irrigate land which permitted percolation back to the stream.

1. Haney v. Neace-Stark Co., 109 Or. 93, 216 Pac. 757, 219 Pac. 190 (1923); Nevada Ditch Co. v. Bennett, 30 Or. 59, 94, 45 Pac. 472 (1896).

2. Williams v. Altnow, 51 Or. 275, 297, 302, 95 Pac. 200, 97 Pac. 539 (1908); Wimer v. Simmons, 27 Or. 1, 9, 39 Pac. 6 (1895). The rule is now incorporated in ORS 540.510 (1963).

3. Trelease and Lee, Priority and Progress -- Case Studies in Transfer of Water Rights, 1 Land and Water Resources J. 1, 21-22 (1966).

4. See, e.g., Mead, Irrigation Institutions 174 (1903).

5. In Williams v. Altnow, 51 Or. 275, 95 Pac. 200, 97 Pac. 539 (1908), the court said:

> "Altnow's appropriation was made for the purpose of irrigating land east of the stream [and] . . . he acquired a prior right to water sufficient for that purpose. He did not, however, acquire title to the water, but only the right to use it for the purposes for which it was appropriated. When not needed for that purpose, it was subject to appropriation by others, and he cannot subsequently change or enlarge his use to their injury. The contemplated use by him of water on land west of the stream would, we think, be a material extension of the rights acquired by him as a riparian appropriator, and might seriously injure or affect the rights of subsequent appropriators." Id. at 303. Cf. Ison v. Sturgill, 57 Or. 109, 123, 109 Pac. 579, 110 Pac. 535 (1910).

6. Or. Laws 1909, c. 216, sec. 65.

7. The statutory requirement that it become "impracticable to beneficially or economically use water" on the land to which it is appurtenant has never been construed as limiting the right to sever the water from the land.

8. Or. Laws 1927, c. 219 (Now ORS 540.510 (1963)).

9. ORS 540.520(1) (1963).

10. ORS 540.520(2) (1963). No notice by publication is required for changes in point of diversion of less than one-quarter mile with no intervening diversion point.

11. ORS 540.520(3) (1963).

12. Ibid.

13. ORS 540.530(1) (1963).

14. Ibid.

15. Reports 31, 32 and 33 of the Oregon State Engineer, (1964 to 1970 - Biennial Reports).

16. Ibid. In the 1962 to 1964 period, out of a total of 245 applications received and pending, 172 were approved, 22 were withdrawn and 51 were not acted upon. In the 1964 to 1966 period out of a total of 248 applications received and pending 170 were approved and 6 were withdrawn, leaving a balance of 72 pending.

17. 74 Or. 592, 637, 144 Pac. 505 (1914), 146 Pac. 475 (1915).

18. Squaw Creek Irrigation Dist. v. Mamero, 107 Or. 291, 301, 214 Pac. 889 (1923).

19. Oliver v. Skinner and Lodge, 190 Or. 423, 449, 226 P.2d 507 (1951).

20. Ibid.

21. ORS 540.510 (1963). In In re North Powder River, 75 Or. 83, 144 Pac. 485 (1914), 146 Pac. 475 (1915), the court said:

> "A change in the point of diversion and place of use may be made when it can be done without prejudice to the rights of others. . . A change, however, as to subsequent appropriators, will not carry with it the priority of appropriation." (Emphasis added). Id. at 92. The italicized language directly contradicts the statute. Furthermore, it is contrary to all the other case law including the cases cited by the court to support the proposition. Hutchins suggested this broad statement should be limited to its facts -- a situation in which any change would be harmful to others. Hutchins, Selected Problems in the Law of Water Rights in the West 379 (1942).

22. Trelease and Lee, Priority and Progress -- Case Studies in Transfer of Water Rights, 1 Land and Water Resources J. 1, 24 (1966).

23. Cole v. Logan, 24 Or. 304, 313, 33 Pac. 568 (1893).

24. Hutchinson v. Stricklin, 146 Or. 285, 28 P.2d 225 (1933); Broughton v. Stricklin, 146 Or. 259, 28 P.2d 219 (1933), 30 P.2d 332 (1934).

25. This was not always the rule in Oregon. In Wimer v. Simmons, 27 Or. 1, 39 Pac. 6 (1895), a miner extended his diversion canal to a new mine causing the return flow to re-enter the stream below the diversion point of a junior appropriator who previously had irrigated with the miner's return flow. The court said that one who had a perfected water right could change the place of use at his pleasure and junior appropriators could not complain. Id. at 12. However, the statute now expressly forbids changes in place of use without the permission of the State Engineer. ORS 540.510 (1963). The effect of the statute was impliedly acknowledged in Cabell v. Federal Land Bank of Spokane, 173 Or. 11, 20, 144 P.2d 297 (1943).

IV LOSS OF PERFECTED APPROPRIATIVE RIGHTS

A perfected water right can be terminated in one of four ways: (1) by voluntary abandonment, (2) by estoppel, (3) by adverse user by another, and (4) by statutory forfeiture.[1] Although courts and legislatures occasionally use some of the above terms interchangeably, the terms are meant to have precise meanings. If the following definitions are kept in mind, the law can be more easily understood despite confusion of terminology.

A. Terminology

Abandonment. Abandonment occurs when an owner of a water right ceases to use the right with an intent to abandon it.[2] The intent to abandon may be inferred from the conduct of the owner.[3] Abandonment can occur in an instant if the intent and the giving up of possession or cessation of use merge.[4] Although most cases involve water right owners who are resisting a conclusion of abandonment, there is now a statutory procedure in Oregon whereby owners can initiate administrative action to cause their right to be terminated.[5]

Estoppel. The following elements must concur to create an estoppel: (1) the person estopped must have attempted to influence another's conduct by an assertion inconsistent with title being in himself, and (2) the other person must, without knowledge of his true rights, act in reliance on the assertion to his detriment.[6] For example, where plaintiffs were induced by defendant to expend money and labor in enlarging a ditch and conducting water onto their land, defendant was estopped from retracting a water right he had impliedly given them.[7]

Adverse User (Prescription). Open, notorious, exclusive, adverse and hostile use of a water right for the period of the statute of limitations will deprive the owner thereof of his title to the benefit of the adverse user.[8] In comparison to title acquisition by limitations in other areas of property law, a special problem exists in showing the adverse user's water use was detrimental to the owner. The burden of proving a substantial interference with the rights of the owner is

on him who asserts the adverse use.[9] The adverse use must have been of such character that the owner could have asserted a legal remedy.[10]

Statutory Forfeiture. ORS 540.610(1) (1963) provides:

> Whenever the owner of a perfected and developed water right ceases or fails to use the water appropriated for a period of five successive years, the right to use shall cease, and the failure to use shall be conclusively presumed to be an abandonment of water right. Thereafter the water which was the subject of use under such water right shall revert to the public and become again the subject of appropriation in the manner provided by law, subject to existing priorities.[11]

This is a statutory declaration that failure to use a water right for five successive years shall cause the right to be forfeited.[12] Intent to abandon, actual or inferred, is not an element of forfeiture.

B. Using Abandonment as a Device to "Transfer" a Water Right Not Otherwise Transferable

Suppose the P Power Company has a first priority to 100 second-feet of flow on X river to develop hydro-electric power at its dam site. A and B are upstream appropriators with priorities secondary only to P. A and B each have a right to 100 second-feet of water for irrigation. During the irrigation season minimum flows in X river sometimes fall to 250 second-feet. During these periods A and B can use only 150 second-feet of their total appropriation because 100 second-feet must be allowed to flow to P. (Ignoring return flow.) But P's use is non-consumptive. C is a downstream irrigator who has appropriated 100 second-feet of water -- a quantity which always flows by his land because of the right of P Power Company which has first priority.[13]

P Power Company now wishes to transfer its priority to A and B for use in irrigation. Can it do so? Probably not. The law permits changes in the point of diversion and the nature of use only where such can be accomplished without detriment to other appropriators.[14] Here C would undoubtedly be harmed. If the transfer is permitted, A and B would have first claim to up to 300 second-feet of water provided they could beneficially use it. The amount of flow available to C

could easily fall below 100 second-feet even allowing for some return flow.

But what if P declares it is abandoning its water right. Then the water becom "public" and is again open to appropriation subject to existing priorities.[15] But A and B now have first priority on the river to 200 second-feet. Thus, C is still injured in times of low flow. Should P be able to accomplish by abandonment an enhancement of A's and B's rights to the detriment of C whose advantageous reliance on P's non-consumptive use would be lost by P's abandonment. In Stevens v. Mansfield, a California case, the court said:

> Abandonment must be made by the owner, without being pressed by any duty, necessity, or utility to himself, but simply because he desires no longer to possess the thing; and further, it must be made without any desire that any other person shall acquire the same; (emphasis added) . . .[16]

This language has been quoted in an Oregon case construing such an attempt, not as an abandonment, but rather as an effort to transfer a right to use water without conforming to the statutory procedure.[17] The attempted "transfer" was not allowed.[1

However, this case was decided prior to a 1955 enactment providing for cancellation of water rights by the owner thereof:

> Whenever the owner of a perfected and developed water right certifies under oath to the State Engineer that the water right has been abandoned by him and that he desires a cancellation thereof, the State Engineer shall enter an order cancelling the water right. Effective upon the order, the water which was the subject of use under the water right shall revert to the public and become again the subject of appropriation in the manner provided by law, subject to existing priorities.[19]

The language of this statute is apparently mandatory. If so, the P Power Company in the above hypothetical could certify that it had abandoned its right, and the cancellation of the right would follow as a matter of course. And by the terms of the statute A and B would acquire a prior right. A literal reading of the statute may not, however, be accepted by a court under these circumstances, particularly if the intent of the P Power Company is to circumvent the transfer statute.

C. Acquisition of Water Rights by Adverse User After 1909

In Tudor v. Jaca the Supreme Court of Oregon said:

> It is a debatable question, under the Water Code, whether subsequent to 1909, an appropriation of water can be initiated by adverse use, or in any other manner than under the statutory procedure.[20]

The issues were reasonably drawn in the briefs of the parties in that case. Respondent argued that one could not acquire an appropriative right by adverse possession. He pointed out that what is now Or. Rev. Stat. 537.120 (1963) provides that "all waters within the state may be appropriated for beneficial use as provided in the Water Rights Act and not otherwise; . . ." The "and not otherwise" language made appropriation by permit the exclusive means of acquiring a water right.[21]

Although admitting the public waters of the state could not be acquired by adverse user, appellant argued that once water had been appropriated it became a possessory interest of the appropriator, and adverse user could run against the person with the appropriative right.[22] To meet respondent's argument that the Water Code by its very language applied to "all waters", appellant cited Skinner v. Silver, 158 Or. 82, 99, 75 P.2d 21 (1938) holding that the Code applied only to "public" waters. When private waters (in this case spring and seepage waters) were involved, the code did not apply.[23]

In his 1942 book, Wells Hutchins discussed the history in Utah on this issue.[24] In two decisions the Utah Supreme Court upheld the right of an adverse user against a prior appropriator whose water he was using. In both cases the State Engineer urged that the prior appropriator's right had been lost by statutory forfeiture before the period for adverse use had run. In three-two decisions, the court stated that as between the parties the prior appropriator had no rights and the issue of the validity of the adverse user's right as against the public was not in question. The Utah legislature subsequently resolved the question against adverse users by amendatory legislation.[25]

On logic it would appear that if the right of the "public" as against an

adverse user was at issue in Oregon where the statutory forfeiture period is shorter than the prescriptive period for adverse use, then, after the shorter perio the prior appropriator would lose his appropriation. This would leave no legal interest for the adverse user to claim when the prescriptive period had run. In some states it has been held that the statutory forfeiture does not operate against one who is not using his water right because no water is in fact available, even if the water is unlawfully being diverted upstream.[26] Such a construction would mean that no forfeiture could occur and the adverse user's claim could indeed ripen into title. However, this construction is at least questionable under the Oregon statut which creates a conclusive presumption of abandonment.[27]

To summarize, if the Oregon court should conclude that adverse user initiated after 1909 can run against an existing appropriation of water, it is still unlikely that the adverse use would be held to ripen into a water "title". Statutory forfeiture of the prior appropriator's right would occur, at least in chronology, before the prescriptive period had run.

1. Hutchins, Selected Problems in the Law of Water Rights in the West 389 (1942). All four ways have been recognized in past Oregon cases. See, e.g., Jones v. Warmsprings Irrigation Dist., 162 Or. 186, 91 P.2d 542 (1939) involving abandonment; McPhee v. Kelsey, 44 Or. 193, 74 Pac. 401 (1903), 75 Pac. 713 (1904) concerning estoppel; Staub v. Jensen, 180 Or. 682, 178 P.2d 931 (1947) involving adverse user; and ORS 540.610(1) (1963) providing for statutory forfeiture applied in Withers v. Reed, 194 Or. 541, 243 P.2d 283 (1952).

2. Hough v. Porter, 51 Or. 318, 434, 95 Pac. 732 (1908), 98 Pac. 1083 (1909).

3. Wimer v. Simmons, 27 Or. 1, 12, 39 Pac. 6 (1895); Dodge v. Marden, 7 Or. 456, 460 (1879). Contrast Joseph Milling Co. v. Joseph, 74 Or. 296, 144 Pac. 465 (1914), holding the evidence did not reveal an intent to abandon, with Jones v. Warmsprings Irrigation District, 162 Or. 186, 91 P.2d 542 (1939) and Oviatt v. Big Four Mining Co., 39 Or. 118, 65 Pac. 811 (1901), inferring such an intent.

4. Wimer v. Simmons, 27 Or. 1, 13, 39 Pac. 6 (1895). Subsequent to the Wimer case Oregon passed a statute construed as requiring an intent to abandon plus a two year period of non-use before abandonment occurred. The statute was repealed in 1955. ORS 540.630 repealed by Or. Laws 1955, c. 671, sec. 1. The act was so construed in Pringle Falls Power Co. v. Patterson, 65 Or. 474, 486, 128 Pac. 820, 132 Pac. 527 (1913). Presumably the repeal of the statute restored the validity of Wimer v. Simmons, supra.

5. ORS 540.621 (1963). The statute is set out in the text accompanying note 19, infra.

6. Smyth v. Neal, 31 Or. 105, 112, 49 Pac. 850 (1897).

7. McPhee v. Kelsey, 44 Or. 193, 74 Pac. 401 (1903), 75 Pac. 713 (1904). But see Bolter v. Garrett, 44 Or. 304, 306, 75 Pac. 142 (1904) holding that a person cannot lose his water right by merely seeing another constructing a ditch and making no objection until the diversion is completed.

8. Wimer v. Simmons, 27 Or. 1, 18, 39 Pac. 6 (1895). The statutory period in Oregon is ten years. Or. Rev. Stat. 12.050 (1965). A water right is considered real property for purposes of the statute. Hough v. Porter, 51 Or. 318, 434, 95 Pac. 732 (1908), 98 Pac. 1083 (1909). See discussion in text accompanying footnotes 20-31, infra, as to adverse user initiated after 1909.

9. Ison v. Sturgill, 57 Or. 109, 119-22, 109 Pac. 579, 110 Pac. 535 (1910). This decision overturned some unfortunate language in Hough v. Porter, 51 Or. 318, 433, 95 Pac. 732 (1908), 98 Pac. 1083 (1909) which suggested the burden of proof was on the one against whom the adverse use was asserted. The Ison decision was reaffirmed in Masterson v. Kennard, 140 Or. 288, 296, 12 P.2d 560 (1932).

10. Wimer v. Simmons, 27 Or. 1, 18, 39 Pac. 6 (1895).

11. ORS 540.631 (1963) refers to water rights abandoned as provided in the above statute, but it is clear that a conclusive presumption of abandonment creates in effect a statutory forfeiture.

12. Cities and towns are exempt from the statute by ORS 540.610(2), (3) (1963). But the state can forfeit its water rights under the statute. Withers v. Reed, 194 Or. 541, 243 P.2d 283 (1952). [4-3 decision]. Lands withdrawn under federal soil bank programs are exempted by ORS 540.615 (1963).

13. The above hypothetical draws heavily on the facts involved in Hutchinson v. Stricklin, 146 Or. 285, 28 P.2d 225 (1933).

14. ORS 540.510 to 540.530 (1963) require persons desiring to change the use or place of use of a water right to apply to the State Engineer for a certificate to do so. The State Engineer may approve the change only if it can be effected without injury to existing rights.

15. Wimer v. Simmons, 27 Or. 1, 6, 39 Pac. 6 (1895).

16. 11 Cal. 363, 366 (1858).

17. Hutchinson v. Stricklin, 146 Or. 285, 301, 28 P.2d 285, (1933).

18. Ibid. See also Broughton v. Stricklin, 146 Or. 259, 277, 28 P.2d 219 (1933), 30 P.2d 332 (1934) decided the same day.

19. ORS 540.621 (1963). Emphasis added.

20. 178 Or. 126, 152, 164 P.2d 680 (1945). Fifteen months later the court held tha at least as to adverse use initiated prior to 1909, a water right could be acquired in this manner. The sympathies of the court are revealed by the fact situation. The plaintiff claimed under a water right initiated and perfected prior to the 1909 code. However, plaintiff had not been notified and failed to appear at a 1919 adjudication fixing all the water rights on the stream. Presumably, had defendant asserted his adjudicated right at this time, plaintif would have been barred despite her appropriation. But defendant failed to asse his right and plaintiff continued her use of the water until 1945. It was this use which constituted the adverse possession which ripened into title. Staub v. Jensen, 180 Or. 682, 178 P.2d 931 (1947).

21. Id., Brief for Respondent, pp. 112-43.

22. Id., Reply Brief for Appellant, pp. 45-51.

23. Id. at 48.

24. Hutchins, Selected Problems in the Law of Water Rights in the West, 400 (1942).

25. Ibid. The following sentence was added to Utah's statutory forfeiture provision: "The provisions of this section are applicable to such unused or abandoned water as is permitted to run to waste or is used by others without right." Utah Laws, 1939, c. 111. It was also provided, "no right to the use of water either appropriated or unappropriated can be acquired by adverse use or adverse possession."

26. Hutchins, note 24 at 396.

27. The Oregon statute set out in the text accompanying note 11 supra, is to be contrasted with the following Wyoming statute which has been construed as not working a forfeiture where the failure to use water was not the fault of the appropriator:

". . . and in case the owner . . . shall fail to use the water . . . for irrigation or other beneficial purpose during any five successive years, they shall be considered to have abandoned the same, and shall forfeit all water rights, easements and privileges appurtenant thereto, . . ." Wyo. Rev.

Stat. 122-421 (1931), now contained in Wyo. Comp. Stat. Ann. 71-701 (1945). The statute was so construed in Morris v. Bean, 146 Fed. 423 (C.C. D. Mont. 1906). Wyoming cases have cited this decision with approval. See Hutchins, supra, note 24 at 396.

"Shall be considered to have abandoned" is certainly less mandatory language than the "shall be conclusively presumed to be an abandonment" language of the Oregon statute. (Emphasis supplied).

V THE CONCEPT OF BENEFICIAL USE

What is a beneficial purpose?

> As to the appropriation of water in the arid and semi-arid portions of the United States the rule . . . is that 'beneficial use shall be the basis, the measure, and the limit of all rights to the use of water" . . . To the extent that water is wasted or is used extravagantly appropriation in its true sense is vitiated. Priority attaches only to what is reasonable and necessary for a beneficial purpose. Excessive greed and avarice in the appropriation of water cannot be countenanced or gratified.[1]

What is the all-important "beneficial purpose" upon which every appropriative water right depends? There are really two questions involved in determining whether a particular use of water has a beneficial purpose.

The first is whether the use in question falls within a general category acknowledged to be beneficial. Lists of such general categories abound.[2] The following types of uses are declared by various Oregon statutes to be beneficial: irrigation, domestic use, municipal water supply, power development, public recreation, protection of commercial and game fishing and wildlife, fire protection, mining, industrial purposes, navigation, scenic attraction, drainage, sanitation, flood control, pollution abatement, and recharging ground water basins or reservoirs The list is not exclusive -- acourt may find other types of uses not listed to be beneficial. An example is stock watering, which would not seem to fit easily within any of the above categories, but which has long been recognized by courts as a beneficial purpose.[4] In the sense in which such categories apply, it is unusual to find a case involving a use of water which is not for a "beneficial purpose."[5]

The second general question in an analysis of "beneficial purpose" is a more difficult one -- whether a particular use is "beneficial" when regarded in the light of local conditions and other competing uses. It is articulated in many ways in the cases, but essentially the court is deciding whether a particular use, under specific circumstances, is of sufficient value to entitle it to judicial protection against those who would use the water in other ways. Notions of private benefit and public policy are often mixed indiscriminately. Decisions frequently cannot

be generalized because they rest on an intricate set of facts. The court may scrutinize the efficiency of the system for using the water and the importance of competing uses. Every decision in this area is a judgment of relative values, but the entire body of such judgments usually travels under the umbrella limiting a water right to what is needed for application to a beneficial purpose.

To draw the outlines of what constitutes a beneficial purpose in this sense in Oregon, every case involving a decree of a water right would have to be examined to see what factors were considered by the court under the myriad of fact situations disclosed in those cases. A few examples, drawn from extreme situations, may serve to illustrate some of the factors that enter into these decisions.

Nevada Ditch Co. v. Bennett[6] granted a priority to an appropriation which was intended, as part of a promotional scheme, to induce settlers to come to the area. The plan was to provide ditches to supply the water to the waiting lands; the prospect of available water would attract settlers who would acquire the lands and then be in a position to put the water to a beneficial use. The settlers had come as anticipated, and the court approved the appropriation in furtherance of a plan which had obviously not been "merely speculative, impracticable or visionary."[7]

But in Cookenham v. Lewis,[8] the Oregon Supreme Court held that the State Engineer was justified in finding that granting a permit to appropriate would be inimical to the public welfare, where the application was for water to be used on arid lands designated for reclamation under the Carey Act. The applicants had acquired no right to reclaim the lands in question themselves; if they were granted the water rights they sought, the court felt that they would be in a position to dictate to the state the terms of contracts for reclamation, and to sell water on their own terms to anyone who was granted the right to reclaim the land. The court said:

> The right to the beneficial use of water to be acquired under the permit applied for under the Water Code is not an opportunity to acquire a monopoly of the water of a stream for promiscuous sale, but must contemplate a use upon specific lands . . .[9]

In Mann v. Parker,[10] plaintiff wished to enjoin an upstream junior appropriator from taking any of the water of the stream. Plaintiff, a miner, was unable to operate his mine during the winter because of severe conditions. However, he contended that it was necessary for water to flow in his ditch during the entire year in order to keep the ditch open. Although it refused the injunction, the court seemed inclined to agree that this might be a beneficial use.[11]

In In re Deschutes River,[12] a power company claimed an appropriation of 40 second-feet of water for the purpose of carrying off river debris which would otherwise interfere with the operation of its turbines. The court pointed out that an appropriation of this quantity would deprive approximately 1600 acres of land of water for irrigation, and allowed the power company's claim only during the nonirrigating season, and then to be exercised in such a way that it would not interfere with the storage of water for future irrigation use.[13]

This case is perhaps the clearest illustration in the Oregon decisions of the dual nature of the question of beneficial purposes. There is no question that the power company's use was beneficial in the first sense discussed above. But it was held to be entitled to protection against junior appropriators only upon conditions which prevented it from interfering with a "more beneficial" use -- the irrigation of 1600 additional acres of land. This problem is sometimes discussed under the heading of "waste." If "beneficial purpose" were considered to have a single meaning, this case would have to be read as holding that a single use - power generation - was beneficial for only a portion of each year, a statement that is patently absurd.

The concept of beneficial use may also include the question of the efficiency of a particular means of using the water. Where an appropriator's dam leaked badly, it was held that he must repair it within a given time, or have his allotment of water decreased.[14] And the court has held that wasteful methods of irrigation do not create a right to the amount of water wasted.[15] In In re Willow

Creek,[16] the irrigation of level lands by merely permitting the stream to overflow was permitted to continue, but as a privilege, not an appropriative right.

In summary, there are few types of uses of water which, considered alone, are not beneficial.[17] But when claimants are competing for the same water, the court, in determining the amount necessary for a beneficial use, may actually be making a sub rosa determination of priorities among uses.

1. In re Umatilla River, 88 Or. 376, 380, 168 P. 922; 172 P. 97 (1918). The importance of a beneficial purpose to the appropriative right is indicated by the fact that the court in this case chose to preface its consideration of the issues with the statement quoted. In the balance of the opinion there is no indication that the beneficial purpose of any appropriator was called into question, or that waste was an issue.

2. See, e.g., 2 Kinney on Water Law, secs. 692-700, listing domestic purposes; irrigation; mining; power; municipal uses; health, recreation and beauty; railroad uses; making ice; and fish propogation; Hutchins, Selected Problems of Water Law in the Western States (1942) pp. 314-24, listing mining, manufacturing and industrial, power, fish propogation, irrigation, stock-watering, and municipal and domestic purposes, recreational uses, fire protection, and flood control and equalization of flow; see also 1 Clark on Water and Water Rights sec. 19.3 for a list compiled from the statutes of several western states.

3. ORS 537.170(3)(a) and (c) (1963); ORS 543.225(3)(a) and (c) (1963); ORS 536.300 (1963); ORS 537.135 (1963).

4. Hutchins, supra note 2 at 314.

5. The most common examples are cases involving the use of water for recreational purposes. In the early cases this was not considered a beneficial purpose. See discussion in 1 Clark on Water and Water Rights, sec. 19.3(D).

6. 30 Or. 59, 45 P. 472 (1892).

7. Id. at 99.

8. 58 Or. 484, 114 P. 88, 115 P. 342 (1911).

9. Id. at 491.

10. 48 Or. 321, 86 P. 593 (1906).

11. The injunction was refused on two grounds: (1) there was evidence that plaintiff had been willing to sell part of the water to the upstream user, which indicated that he didn't regard the water as essential, and (2) if plaintiff suffered any damage from the upstream use it would be slight in comparison to the burden an injunction would place on the defendant.

12. 134 Or. 623, 286 P. 563, 294 P. 1049 (1930).

13. Id. at 664-68.

14. Broughton v. Stricklin, 146 Or. 259, 275, 28 P.2d 219, 30 P.2d 332 (1934). The court spoke in terms of a duty to prevent waste, rather than of a limitation to beneficial use. However, the enforcement by means of reducing a water allotment indicates that efficient application to a beneficial use was employed as a measure of the right.

15. Hough v. Porter, 51 Or. 318, 419-20, 95 P. 732, 98 P. 1083 (1909).

16. 74 Or. 592, 621-22, 144 P. 505, 146 P. 475 (1915).

17. ORS 449.095 (1971) declares water pollution to be not a "reasonable or natural use" and contrary to public policy.

VI APPROPRIATION OF WASTE, SPRING AND SEEPAGE WATERS

Since 1893, an Oregon statute has provided:

> All ditches now or hereafter constructed, for the purpose of utilizing waste, spring, or seepage waters, shall be governed by the same laws relating to priority of right as those ditches constructed for the purpose of utilizing the waters of running streams; provided, that the person upon whose lands the seepage or spring waters first arise, shall have the right to the use of such waters.[1]

In 1901 the Oregon Supreme Court stated that the effect of the main portion of the statute was to make the described waters subject to appropriation the same as waters in a running stream.[2] Most litigation involving the statute has centered around the proviso, giving a first right of use to the owner of lands where spring or seepage waters arise. The proviso has been interpreted to apply only to spring water which is not part of a water course, but the cases are not clear on the question of just when spring waters become subject to appropriation. The following distinctions have been made by the court:

> . . . where . . . the admitted quantity is so insignificant that a surface stream is impossible, when spread over the width of ground . . . the use of the water belongs to the person upon whose land it first arises.[3]

> If spring water is of sufficient quantity to rise to the surface and flow off in a definite channel with a tendency to regularity, it is subject to appropriation.[4] A spring whose waters, because of seepage and evaporation, would not flow in any channel or to or upon adjacent property, is not subject to appropriation by anyone other than the owner of the land.[5]

> Where the springs in question did not constitute headwaters of a stream, they belonged exclusively to owners of the land where they arose.[6]

The general trend of the decisions makes the distinction according to whether the spring produces enough water to form a stream. But in one case the court said that the plaintiff, who held a permit to appropriate from a spring on defendant's land, had no right to appropriate any water if the spring did not produce water in excess of defendant's needs. The permit would only give him the right to appropriate the surplus. Defendant had the first right of use, but could not waste the water or prevent the surplus from flowing in its natural channel.[7]

The court has also stated that water in a spring arising on private land is the property of the land owner, and not subject to appropriation. A distinction was made between the water in the spring and that which has passed away from the spring or become part of a running stream. This case, however, involved a spring with no overflow and only a little seepage.[8]

In Minton v. Coast Property Corporation[9] it was held that water from springs could be appropriated, if it formed a flowing stream, while still on the land where it arose. This must be regarded as dictum, since the attempted appropriation was declared ineffective because accomplished by a trespass.

The Oregon Supreme Court's latest statement on the subject is found in Fitzstephens v. Watson, decided in 1959:

> Where spring waters arising on an owner's land do not flow from the spring in such a manner as to constitute a watercourse it has been held that the owner is entitled to the exclusive use of such waters as against competing claimants. . . .
>
> Where, however, the waters leaving the spring form a watercourse and flow to the land of another the waters in the watercourse are subject to the law applicable to the appropriation of stream waters and the circumstance that the stream originated on an owner's land does not give him any preference to the water over other persons. . . . Logically the same rule is applicable if the waters forming a watercourse do not leave the owner's land before emptying into another watercourse as was the situation in the present case.[10]

In summary, when a spring does not produce sufficient water to form a watercourse and the water is dissipated on the land where it arises, it belongs to the owner of the land. The Oregon court has held that such waters are not public waters; rather they are "part and parcel of the land itself".[11] "It is private water, a part of the land upon which it arises, and belongs to the owner of that land."[12]

The minor inconsistencies in the cases involving springs sufficient to form a watercourse could be reconciled on the basis that the owner of land can take water directly from a spring on his land, but if he allows it to flow into a natural channel, it becomes subject to appropriation, even while still on his land. Such a distinction would indeed be artificial, but no more so than that

made by the court when it held that a property owner could use the water from springs on his land even though this use interfered with the water supply on adjoining land, where if unused the water would make its way there by seepage rather than by flowing in a natural channel.[13]

The law of waste water under the statute appears to be clear. Such water may be recaptured by the original owner while it remains on his land, and he may use it or sell it to another without the necessity of a permit.[14] But when the waste water reaches a natural stream it is once again public water and subject to a new appropriation.[15]

Seepage waters have received little attention. The term is not defined by statute or in the Oregon cases. According to Tolman, the accepted meaning of seepage is "the appearance and disappearance of water at the ground surface."[16] This would be consistent with the wording of the statute describing such waters as "arising" on the land. However, the Oregon Supreme Court has also used the word to describe the horizontal movement of water through the soil.[17] According to Kinney seepage water is generally understood to mean

> . . . the water which begins to appear in spots below irrigation canals and fields cultivated by irrigation, usually some months, or even years, after irrigation has been introduced, and which tends to convert the lowlands into marshes and gives rise to springs, and which, in turn, may be employed in watering other fields.[18]

It probably matters little just what definition of seepage waters is adopted. The only problem distinct from the rules governing waste water and spring water which does not form a watercourse involves rights to seepage water of the type described by Kinney - that having an artificial source. However, the court has held that if water passes onto a party's land only by seepage through the soil, he has no right to the continuation of that flow.[19] This rule, together with the right of the landowner to recapture waste water before it leaves his land, should dispose of any attempted assertion of a right to an unaltered supply of seepage water from another's diversion works.

1. Or. Laws 1893 p. 150 sec. 1; now ORS 537.800 (1963).

2. Brosnan v. Harris, 39 Or. 148, 65 P. 867 (1901). The case involved conflicting claims of right to use spring water, between an appropriator from a spring on public lands and a later homesteader on the same land. The court held for the prior appropriator.

3. Morrison v. Officer, 48 Or. 569, 570, 87 P. 896 (1906). The court described the proviso as ". . . a grant of the exclusive right to the use of the unappropriated water specified to the person upon whose land such water first arises, and was probably a recognition of a practice prevailing in the arid region of the United States. . ." Id.

4. Hildebrandt v. Montgomery, 113 Or. 687, 690, 234 P. 267 (1925). The holding of this case is that spring waters of the type described located on public land are subject to appropriation, and one who later acquires title to the land has no right to use the water to the injury of a prior appropriator.

5. Klamath Development Co. v. Lewis, 136 Or. 445, 450, 299 P. 705 (1931).

6. Tarduer v. Dollina and Elliott, 206 Or. 1, 42-43, 288 P.2d 796 (1955).

7. David v. Brokaw, 121 Or. 591, 256 P. 186 (1927).

8. Henrici v. Paulson, 134 Or. 222, 293 P. 424 (1930).

9. 151 Or. 208, 46 P.2d 1029 (1935).

10. Fitzstephens v. Watson, 218 Ore. 185, 194-95, 344 P.2d 221 (1959).

11. Skinner v. Silver, 158 Or. 81, 96, 75 P.2d 21 (1938).

12. Beisell v. Wood, 182 Or. 66, 71, 185 P.2d 570 (1947).

13. Messinger v. Woodcock, 159 Or. 435, 80 P.2d 895 (1938).

14. Barker v. Sonner, 135 Or. 75, 294 P. 1053 (1931).

15. Hutchison v. Stricklin, 146 Or. 285, 28 P.2d 225 (1934); Cleaver v. Judd, 238 Or. 266, 393 P.2d 193 (1964).

16. Tolman on Groundwater p. 563.

17. West v. Taylor, 16 Or. 165 (1888).

18. 2 Kinney on Water Rights 1207.

19. West v. Taylor, 16 Or. 165, 171 (1888).

DIFFUSED SURFACE WATER AND DRAINAGE

I. INTRODUCTION

This paper concerns Oregon law which is applied to the drainage of diffused surface waters and related problems. Diffused surface waters may be defined as the waters from rains, springs and melting snows which lie or flow on the surface of the earth but do not form a part of a well-defined body of water or a natural watercourse. Two theories in regard to diffused surface waters, essentially arising in an agricultural context, have been developed by American courts; the civil law theory and the common law (or "common enemy") theory. Various modifications or exceptions have developed as to each theory, even in a single jurisdiction. A third theory, referred to as the reasonable use doctrine, is briefly discussed later in this paper.

Generally speaking, under the civil law theory lower lands owe a service to receive the burden of diffused service waters which may flow from the higher lands.[1] Rights of landowners under this theory are considered appurtenant to and a part of the land itself. The right of the upper (dominant) land to have the surface waters residing thereon flow in their natural condition onto the lower lands is considered a servitude or natural right which inheres in the estate entitled to its benefit, independent of any contractual or prescriptive right. This is not a reciprocal servitude as the owner of the upper land may, if he elects to do so, entirely divert the surface water or capture it for his own use.

The civil law rule is based on the principal of natural advantage and prescribes that the order of nature should be disrupted as little as proves to be possible. This rule does tend to inhibit the development of land. Its application where the natural order of drainage is substantially altered or disturbed by man may become imprecise and uncertain. This is particularly true where the context shifts from an agricultural to an urban setting.

The other theory, referred to as the common law rule, treats diffused surface waters as a "common enemy" against which each landowner can protect himself.[2] No drainage servitude exists in favor of the upper landowner. The lower landowner may at his option lawfully obstruct or hinder the flow of such waters and, in so doing, turn them back or off his own land without liability to his neighbors for such obstruction or diversion. The upper owner may, in turn, attempt to alter the natural drainage pattern and cast the waters upon his neighbor's lands. Although this theory may favor land improvements, by so doing it places the law on the side of the "mighty" who can afford to do as they choose with drainage problems. Various modifications of the full rigor of this doctrine normally set in through evolving appellate decisions in a particular jurisdiction.

II. OREGON LAW ON DRAINAGE

A. Early Case Law

In Whitney v. Willamette Ry. Co.[3] the plaintiff complained that his fill in a gulch in Portland had been washed out by the defendant's turning of surface water into the gulch during the construction of a street railway line. In reviewing the trial court's instructions, the Oregon Supreme Court stated that the defendant could artificially turn surface water from its road into the gulch where it was accustomed to flow, without liability to adjoining landowners, where the amount of surface water was not increased. The Court refused to choose between the civil law and common law theories because in either case, the defendant would have the right to carry the surface water into the gulch into which it was accustomed to drain.

B. Adoption of the Civil Law Rule in Oregon

In Rehfuss v. Weeks[4] defendant's property was a natural basin or low area that collected water. The plaintiff's land was in the natural drainage path between this basin and a creek. For many years a ditch on defendant's

land assisted the flow of natural drainage. Defendant slightly enlarged this ditch and was sued by plaintiff for the damages allegedly resulting from the drainage onto plaintiff's land. In affirming for the defendant, the Court adopted the civil law rule:

> The requested instruction ignores the rule as to surface water. A portion of the water in question appears to come within such designation. The defendant as a land owner, had the right to turn or expel upon the land of an adjacent owner, surface water that would naturally flow there, and in such quantities as would naturally drain in such direction, without liability for damages . . . The owner of upper lands is not prohibited by the rule from cultivating his lands or draining them by artificial ditches, though surface water is thereby precipitated more rapidly upon the lands of the adjacent owner below, provided he does not cause water to flow on such lands which, but for the artificial ditches, would have flowed in a different direction, and provided he acts with a prudent regard for the interests of such adjacent owner . . .[5]

The qualification in regard to facilitating natural drainage, that it must be done "with a prudent regard for the interests of such adjacent owner" is a hedge with which the Court has had to struggle in subsequent cases.

C. Application of the Civil Law Rule -

A lower owner interfering with natural drainage by backing up water onto upper lands.

The Rehfuss case approved what can be described as a modified civil law rule. It established the right of the upper proprietor to facilitate natural drainage of diffused surface water by ditches or other artificial means, so long as (1) "surplus" waters were not collected in a reservoir and discharged through a ditch onto neighboring lands, (2) the natural direction of the drainage was not diverted to other lands, (3) greater quantities of surface water were not caused to flow than would naturally drain in that direction, and (4) a "prudent regard" for neighbor's interests was maintained.

The other side of this coin concerns the right of the lower proprietor to block or interfere with the drainage through such ditches or other drainage

works as are sanctioned by the Rehfuss decision.[6] This factual pattern arose in Harbison v. City of Hillsboro.

Plaintiff farmer constructed a ditch in cooperation with his neighbors across his and his neighbors' lands to facilitate the carrying off of diffused surface water along natural drainage lines to the Tualatin River. The city of Hillsboro subsequently built a sanitary and storm sewer system and its outlet dumped or flowed this waste water onto a neighbor's land situated between plaintiff's land and the river. The city had purchased the right to dump the waste water onto the neighbor's land through which the common ditch ran. However, the effect of this dumping was to back up the filthy waste water onto plaintiff's land through the ditch. The city contended that plaintiff had only a license in the ditch across the neighbor's land and that this license was revoked when the city purchased its dumping "right" from the neighbor.

In applying the civil law rule, the Court stated that plaintiff's drainage rights do not depend upon prescription or a purchased drainage easement. The city was held liable in damages for improperly interfering with the plaintiff's drainage as artificially but properly augmented by the ditch.

Even under the common law rule as to drainage, the Court expressed doubt that a city could dump sewage in a surface drainage area and escape liability for resulting damage to property owners in the area. Considering this pollution aspect of the case on a private nuisance theory, (a straight tort analysis) it may be questioned whether the Harbison case is actually the "other side of the coin" of the Rehfuss case as to interference with natural drainage lines by the lower proprietor - that is, interference with the upper proprietor's property "rights".

However, the Court did go on to use language, even if dictum, to reinforce

the modified civil law rule on a property "rights" analysis.

The Court stated that the law of this state favors the drainage of land.

> The interest of the people of this state demands that as far as possible all of the swamps, marshes, swales and wet land that can be successfully and conveniently drained and reclaimed should be permitted so to be treated, having due regard for the rights of owners of adjacent land. Water seeks its level. The rule that would best serve in this state, and tend to promote the interest of the people without causing undue hardship, would be to allow the owner of land to turn upon the land of an adjacent owner surface water in such quantities as would naturally drain in that direction by means of artificial drainage even though the flow of such water upon the lower tract is accelerated, due regard being observed for the interest of the adjacent owner so as to cause no unreasonable inconvenience . . . According to the verdict, the City of Hillsboro connected its sewer with a private drain, overtaxing its capacity, and allowed material to accumulate and obstruct the flow of water causing it to flow back on private property of plaintiffs; and the city is liable for the damage . . . [7]

D. Application of the Civil Law Rule - A lower owner interfering with natural drainage by backing up flood waters onto upper lands.

In Wellman v. Kelley [8] the Oregon Supreme Court applied this civil law rule to waters which had their source, not in diffused surface water, but in flood waters caused by seasonal overflow of a river.

In Wellman the Powder River flowed northerly through plaintiff's ranch. Spring run off increased the river's flow and caused it to spill over the west bank onto plaintiff's land. This had created a natural slough or swale extending northwest on plaintiff's land and onto defendant's neighboring ranch. The ancient slough eventually carried the water back to the river.

In 1951 defendant built a dike along the boundary line between the two ranches. This dike blocked the natural drainage through the slough and increased the slough "pond" on plaintiff's ranch from 3 to 40 acres. Defendant also installed a headgate and released the water at his leisure to flow onto his ranch. In effect, the defendant was blocking the flood waters, creating a small reservoir on plaintiff's land to impound the spring overflow, and then releasing it at his option for future use on his lands.

The Court affirmed an injunction in favor of plaintiff. The defendant argued that he was justified in protecting his land by a dike as to flood waters. However, the Court distinguished ordinary flood waters from extraordinary flood waters and in effect applied the civil law rule to ordinary flood waters. Ordinary flood waters were defined as those resulting from an annual or seasonal overflow which can be anticipated in view of the flood history in the locale and which is not of an unprecedented magnitude. As a normal spring run off, these flood waters accumulating in the slough were considered "ordinary". The Court reaffirmed the civil law rule which inhibits the lower proprietor from obstructing diffused surface water and applied it to ordinary flood waters, especially when such waters were moving slowly in an ancient slough in line with a natural drainage channel back to the river.

As to extraordinary flood waters of an unusual magnitude and unpredictable, the Court in dictum indicated that such water could be treated as a "common enemy", justifying each landowner's efforts to repel them and protect his own land from damage.

If the Court had treated the slough as a watercourse, the same result would undoubtedly have obtained under a rule protecting a riparian owner against downstream private obstructions to the watercourse which cause a "back up" of water onto his lands. However, the slough apparently did not have sufficiently defined banks nor carry enough water on a fairly sustained basis to meet the definition of a watercourse.

E. Application of the Civil Law Rule - Municipal Liability

In several instances, municipalities in Oregon have been held liable to landowners for improper drainage works.[9] In Ulmen v. Town of Mt. Angel, the city constructed an underground tile drain that collected surface water from streets and drainage from house lots. This drain carried the water through a

connecting gulley near plaintiff's residence, which was on low ground. The water in plaintiff's well was adversely affected by the drainage. The Court did not clearly distinguish between plaintiff's rights as a property owner in regard to excess drainage of surface water and plaintiff's rights as a property owner not to be unreasonably interfered with in her enjoyment of her land by polluting substances carried nearby by the action of the city. However, the Court apparently proceeded on a nuisance theory because it treated the water as sewage and enjoined the city from depositing it in the gulley adjacent to plaintiff's well.

In a case which clearly involved surface water drainage onto private land, the Court held a city liable in damages for diverting surface water drainage from streets through a pipe which discharged onto plaintiff's land to its injury.[10] The pipe carried the water across the street - thus changing the natural flow of drainage - and cast it upon plaintiff's land.

A more complicated and troublesome case is Levene v. City of Salem.[11] Plaintiff owned a veterinary building adjacent to a highway in Salem. A small stream ran through plaintiff's property and under the highway through two 24 inch tiles. The city built a drainage system in the area which involved a large ditch and tiles. Subsequently during the rainy season, the effect of the drainage system was to accelerate considerably the flow of water in the stream. The water backed up and severely flooded the plaintiff's building located adjacent to the stream because the two tiles under the highway were not sufficient to carry off the increased stream flow.

Plaintiff was awarded damages but the injunction issue was moot on appeal. The tiles under the highway had been enlarged, apparently eliminating the flood danger.

In a rather rambling opinion, the Court stated that (1) the plaintiff as riparian owner has a right to insist that the natural flow of the stream not be

increased by artificial means to his detriment, (2) the damage to plaintiff's building was caused by the city's drainage system casting an increased volume of surface water into the stream - a watercourse - crossing plaintiff's property under circumstances of an inadequate outlet under the highway, (3) this affirmative act of the city causing periodic flooding could be described as a trespass or a nuisance as to plaintiff, and the basis of the city's liability need not rest on negligence, and (4) the city could not rely upon sovereign immunity.

The Court affirmed the modified civil law rule and stated that municipalities are bound by it the same as natural persons. However, the city contended that under the rule it may without liability drain surface water from land, by means of ditches and tiles, into a stream or onto lands where it would naturally flow, even though such natural flowage is thereby accelerated. The Court accepted this as an abstract statement of the law but qualified it by stating that the city must act with a reasonable consideration for the rights of the lower proprietor. "If its acts cause an unusual and unreasonable amount of water to be emptied upon the lower land, it is liable for damages to the owner thereof."[12]

Although the Court did not cite the Rehfuss case, it did cite other surface water drainage cases and in effect gave content to the qualification in that case stated in an agricultural context that in facilitating drainage by artificial works, the actor must give "prudent regard" to the interests of the adjacent landowner.

It could be argued that the Levene case went beyond a modified civil law rule and was approaching the "reasonable use" doctrine adopted in some jurisdictions[13] and by the Restatement of Torts, Section 833. Most courts, applying the civil law or common law rule, have regarded controversies over

surface waters as involving problems of property law rather than tort law and speak in terms of property rights of the possessor or landowner rather than in terms of another's legal duties and liabilities under tort law. The term "right" may be used indiscriminately to denote both the plaintiff's legal claims and the defendant's privileges to act and is confusing when applied to conflicting interests of adjoining landowners, each of whom has the same "property rights". The semantics problem is compounded when the "right" (whether a "claim" or a "privilege") is described as fixed and absolute without regard to circumstances. Modifying words such as "reasonable" or "prudent regard" are then applied by courts to inject the necessary flexibility into property "rights".

The liability of a possessor or landowner for harming his neighbor through the medium of surface water is a tort liability, but the emphasis on property "rights" under the two traditional theories has obscured this fact. In the Levene case there was no statement that the city even owned or was in possession of land over which it constructed the drainage system. Therefore, a modified civil law rule which purports to specify the relationship between adjoining possessors of land as to surface waters on the basis of property "rights" would not, strictly speaking, even apply. The Court could have proceeded to analyze liability strictly in terms of tortious conduct. As it was, the Court discussed trespass, private nuisance and property "rights" but rejected negligence as a basis for the city's liability. This doctrinal confusion or "everything but the kitchen sink" approach is unfortunate but fairly typical of surface water cases in other jurisdictions. In any event, the result of the Levene case appears correct on any theory. The effect of the city's drainage was to collect surface waters and cast them in unusual quantities in focused fashion upon plaintiff's land.

The Restatement of Torts, Section 833, treats non-trespassory invasions of a person's interest in the use and possession of land resulting from another's interference with the flow of diffused surface waters as governed by the usual rules of tort liability. Where the invasion is not intentional, the liability of the person harmfully interfering with the flow of surface waters depends upon whether it is negligent, reckless or ultrahazardous. Where the invasion is intentional (the Court in Levene apparently thought the city acted intentionally in the sense it knew that flooding was substantially certain to result from its drainage system), then liability depends upon whether the invasion is unreasonable. The invasion is unreasonable unless the utility of the actor's conduct outweighs the gravity of the harm.

Although the Court in the Levene case emphasized tort concepts in its opinion, it cannot be said (1) that this case rejected the modified civil law as an articulation of the plaintiff's property "rights" nor (2) that it adopted the rule of reasonable use under tort law as defining liability for interference with surface waters. In the last analysis the Court simply held the city liable for damages on a private nuisance theory when it cast an increased volume of surface water into the stream crossing plaintiff's premises, without there being an adequate outlet, thereby causing periodic flooding to plaintiff's building.

F. Scope of the Civil Law Rule - Accelerating the flow of natural drainage by the upper proprietor's installation of artificial drainage works.

Following the Levene case, the Oregon Supreme Court quickly isolated that case, returned to a strict application of the modified civil law rule and rejected any implication that Oregon was moving to a reasonable use rule under tort principles. In Garbarino v. Van Cleave,[14] plaintiff owned 43 acres of lowland, the former bed of a reclaimed lake, north of Salem. Defendants, upland owners, installed an underground system of clay tiles to facilitate the

drainage of surface water during the rainy system. Although the system did not change the quantity or location of the water discharged upon plaintiff's land, the flow was admittedly accelerated. Plaintiff sued to enjoin defendants from the further use of this method of draining the land, alleging that the system was causing plaintiff's land to be eroded and flooded. Decree for defendants was affirmed. The Court approved a modified civil law rule under which the owner of upper land may accelerate the flow of surface water by such drainage system as may be required by good husbandry, without liability for damages to the owner of lower lands, if the water is not diverted from its natural channels.

The case is troublesome because even though factually the total quantity of drainage water may not be increased by upland drainage works, the acceleration of the natural flow certainly increases the potential for damage and erosion to the lower lands. On the facts the case is perhaps easy - the Court stated that the plaintiff failed to establish by a preponderance of the evidence that the erosion was caused by the accelerated flow and not from severe summer storms. The rainfall in January, 1954, for example, was nearly 10 inches and in one 24 hour period it rained over two inches. The reclaimed lake was particularly vulnerable to erosion. Proof failed to put the blame for the erosion during the winter months upon defendant's tile system.

On the law, the case is more difficult. The Court put aside the qualificatic that the upper owner must act "with a prudent regard for the interests of such adjacent owner" (Rehfuss case) and the qualification that he must act with a "reasonable consideration for the rights of the lower proprietor" (Levene case). The upper owner's privilege to facilitate natural drainage is not measured by the extent of the damage to the lower proprietor. This qualifying language, said the Court, could be an admonition against damaging the lower owner by

changing the place at which surface waters flow or by concentrating them into one discharge point upon lower lands. In any event "[T]here may be circumstances under which the extraordinary acceleration of the flow of surface water in its natural channels may be enjoined."[15] (Emphasis supplied).

The difficulties of applying qualifying or "hedging" language are perhaps the natural result of a property "rights" approach. Such difficulties are directly dealt with under a torts analysis. Putting aside the proof problem as to causation in this case, on the facts the defendant's "invasion" of the plaintiff's use and enjoyment of the reclaimed lake would seem reasonable because the utility of the defendant's conduct outweighs the gravity of any harm. Restatement of Torts, Section 826.

The Court distinguished the Levene case by pointing out that in that case the defendant had diverted surface water into a watercourse flowing through plaintiff's property. Such lame distinctions will continue to be necessary as long as drainage cases are decided by applying a rather stereotyped definition of property "rights" to the respective adjoining proprietors. This criticism must be tempered by the observation that conceptual inflexibility has not prevented the Court from flexibility in terms of the results reached in each case.

Another observation is that the Court has made no legal distinctions between drainage problems in a rural setting and an urban environment. In an agricultural setting, favoring upper lands even to the extent of permitting accelerated drainage by artificial works has the impact of encouraging good husbandry and better land use. It also has the effect of coercing in some degree cooperative efforts on the part of the owners of lower lands to participate in local drainage projects in the farming area. They can, of course, take a "dog in the manger" attitude, but they cannot recover damages or enjoin the upper owner's drainage project if done within the limitations

of the modified civil law rule.

In an urban environment the physical setting is more inflexible and a community of interest in the regulation of drainage in any particular fashion is not so apparent. Freedom of individual physical action is more restricted. Inadequate drainage projects on the part of local governments tend to result in stagnant pools on the one hand (Ulmen case) or accumulating and casting an unreasonable discharge of surface water onto somebody's land on the other hand (Levene case). As to private landowners, the construction of homes, buildings, streets and other improvements in the city so radically alters the natural drainage pattern that application of the modified civil law rule becomes nearly impossible. The individual lot owner may be helpless insofar as a physical solution within his sole power is concerned. Looked at in this fashion, it is perhaps not surprising that the Court in the Levene case (an urban setting) took greater refuge in tort principles whereas the Court in the Garbarino case returned to the fundamentals of drainage law in the country as an aspect of the property "rights" of adjoining acreage owners.

More explicit recognition of such factors by the courts might assist in clarifying the law of drainage. At the very least, it would serve to distinguish cases on a more realistic basis.

G. Cases Illustrating Proof Problems

In Butler v. Maas[16] plaintiff's bottom land drained naturally across defendant's adjoining farm to the Coquille River. Plaintiff claimed defendant had plowed in such a way to interfere with natural drainage. However, defendant showed he had constructed a ditch to improve drainage on both farms and plaintiff had failed to contribute any of the costs. On disputed facts, the Court held the proof insufficient to establish that defendant had blocked

natural drainage and cast surface waters back upon plaintiff's land.

Schweiger v. Solbeck[17] was tried as a negligence case (tort theory). The defendant's logging operation had left considerable slash and debris in a steep ravine. Although no eye witnesses testified, heavy but normal rains apparently resulted in a build-up of water trapped in the ravine and a landslide carried mud and slash onto plaintiff's land, destroying a cabin. Questions of negligence and proximate cause were submitted to the jury. Property "rights" from drainage law were not applied.

III. DISTINCT FACT PATTERNS TO WHICH THE MODIFIED CIVIL LAW RULE AS TO DRAINAGE DOES NOT APPLY

A. Pollution

Where diffused surface water is polluted by discharging extraneous substances into the drainage field, liability is analyzed on tort principles of nuisance and trespass. [In substance, this approach has been taken as already noted, in several cases involving pollution by municipalities.][18] Drainage rights under the modified civil law rule do not extend to adding foreign substances to the surface water, at least not if a tort results or pollution laws are violated.

In regard to private polluters, Adams v. Clover Hill Farms[19] held that the right of drainage of the upper owner does not extend to polluting the flow of the diffused surface water. In this case, the defendant, who operated a dairy farm, used a swale for drainage from his feed lot and barn area. This swale extended partly onto plaintiff's adjoining land, creating a stinking mess, at least insofar as plaintiff's use and enjoyment of his own property was concerned. Although the Court was sympathetic with the owner of this "up-to-date dairy farm in an ideal place in the country,"[20] it nonetheless recognized the condition as a nuisance and enjoined its continuance.

B. Artificially Developed Waters

The Oregon Supreme Court has refused to apply the rule of drainage law to waters artificially developed by a manmade project. In Street v. Ringsmeyer[21] plaintiff claimed that the defendant had dammed or blocked surface water flow on his land, thereby causing an overflow on plaintiff's roadway. There was no exact proof of the source of the water - it could have been seepage water from one or more of several irrigation canals in the area. The locale was the John Day country in August - hot and dry - so the water was "artificially" developed. The Court said the defendant had a right to repel such "artificial" water from his land without liability. There was no proof that defendant was responsible for bringing the water onto his land in the first place.

C. Diversion from a Watercourse

The modified civil law rule permitting certain drainage improvements applies to diffused surface waters but not to a diversion from a watercourse which returns the water to the stream through a drain field. In Stephens v. City of Eugene,[22] the city constructed a power plant on the McKenzie River. In its operation, the city diverted water from the river and then discharged it into a slough which flowed through plaintiff's land before returning the water to the river. This substantial increase in the volume and flow of water across plaintiff's natural drainage channel was called a continual trespass, entitling plaintiff to damages and also an injunction, unless the city condemned a flowage easement. In effect, the city was using plaintiff's land as a channel to return diverted river water to the river. These facts gave rise to no drainage right in the city.

D. Obstruction of a Watercourse

Obstructions or changes to watercourses by man's activities should be

distinguished for legal purposes from similar obstructions or changes to surface water movement. Sometimes the cases become intermingled when legal authority is cited for a proposition of law. This should be avoided because the rules are not always the same for both categories. This note concerns only diffused surface water, but one watercourse case is discussed for illustrative purposes.

In Price v. Oregon Railroad Co.,[23] the railroad had passed Hale Creek, a small stream, under its tracks through a three foot (diameter) iron pipe. During a summer storm, the pipe could not carry the increased flow of the creek and it backed up onto plaintiff's farmhouse area to his injury. This was treated as a tort case, liability resting on negligence. The Court stated that the defendant was required to use reasonable care and skill in the construction of the creek overpass to avoid injury to the plaintiff by reason of freshets or seasonal (ordinary) floods. However, the Court appeared to say the defendant railroad had no duty to prevent injury from extraordinary floods. It was for the jury to decide what kind of a flood this was. This case may perhaps be questioned as current law on the standard of care required of a railroad in constructing a track bed over a watercourse, but it is noted here because the Court correctly rejected any reference to the diffused surface water cases as the relevant body of legal precedent.

1. Taylor v. Conti, 177 A.2d 670 (Conn. 1962); Harper v. Johannesen, 371 P.2d 842 (Idaho 1962); Scanlan v. Hopkins, 270 A.2d 352 (Vt. 1970).

2. Luther v. Winnisiment Co., 9 Cush. 171 (Mass. 1851); Town of Union v. Durkes, 38 N.J. 21 (1875); Morris v. Townsend, 172 S.E. 2d 819 (So. Car. 1970); Bjowatn v. Pacific Mechanical Const., Inc., 464 P.2d 432 (1970).

3. 23 Or. 188, 31 Pac. 472 (1892).

4. 93 Or. 25, 182 Pac. 137 (1919).

5. Id. at 32.

6. 103 Or. 257, 204 Pac. 613 (1922).

7. Id. at 273, 274.

8. 197 Or. 553, 252 P.2d 816 (1953).

9. 57 Or. 547, 112 Pac. 529 (1911).

10. Metzger v. City of Gresham, 152 Or. 682, 54 P.2d 311 (1936).

11. 191 Or. 182, 229 P.2d 255 (1951).

12. Id. at 191.

13. Weinberg v. Northern Alaska Development Corp., 384 P.2d 450 (Alaska 1963); Rodrigues v. State, 472 P.2d 509 (Hawaii 1970); Armstrong v. Francis Corp., 120 A.2d 4 (N.J. 1956); Sanford v. Univ. of Utah, 488 P.2d 741 (Utah 1971); Mulder v. Togue, 186 N.W. 2d 884 (S.D. 1971).

14. 214 Or. 554, 330 P.2d 28 (1958).

15. Id. at 561.

16. 163 Or. 201, 94 P.2d 1116 (1939).

17. 191 Or. 454, 230 P.2d 195 (1951).

18. Harbison v. City of Hillsboro, supra note 6, and Ulmen v. Town of Mt. Angel, supra note 9.

19. 86 Or. 140, 167 Pac. 1015 (1917).

20. Id. at 144.

21. 108 Or. 349, 216 Pac. 1017 (1923).

22. 90 Or. 167, 175 Pac. 855 (1918).

23. 47 Or. 350, 83 Pac. 843 (1906).

GROUND WATERS

I. CLASSIFICATION OF GROUND WATERS

The legal classification of underground waters had its origin in court decisions in the last century.[1] The system of classification developed as an aid to decision making in the judicial resolution of disputes. However, the physical facts governing subsurface waters were largely unknown and thought by judges to be unknowable, so it is not surprising that the classification system had little relationship to the realities of ground water movement.[2] Terminology and doctrine tended to be borrowed from the law of surface watercourses. Courts and legislatures often elaborated on earlier inaccurate classifications in applying new scientific knowledge. In 1912, Kinney in his treatise, employed the following detailed classification system in his treatment of ground water rights.

1. Subterranean water courses or streams
   a. with known and defined channels
      (1) independent
      (2) dependent (upon surface streams for flow)
   b. with unknown and undefined channels

2. Artesian waters

3. Percolating waters
   a. diffused percolations
   b. percolations tributary to water courses or other surface bodies of water
   c. percolations tributary to underground reservoirs
   d. seepage waters[3]

In 1942, Hutchins classified waters in a system which employed the two basic legal divisions of underground waters: (1) waters flowing in defined subterranean channels; and (2) diffused percolating waters.[4] But in a discussion of the ground water law of the western states, he employed each of the following more detailed divisions at least once (the categories are not mutually exclusive):

1. Waters in definite underground channels
2. Underflow of streams
3. Percolating waters
   a. tributary to surface watercourse
   b. not tributary to surface watercourse
   c. artificially developed
4. artesian waters
5. bodies of ground water with reasonably ascertainable boundaries
6. waste, spring, or seepage waters.[5]

The common law of ground waters is of relatively recent origin.[6] It nevertheless preceded the development of the science of hydrology, and has yet to be accommodated adequately to the evolving knowledge of underground waters. The division into underground streams and percolating waters remains the major distinction in the law.

II. MAJOR DOCTRINES IN THE LAW OF GROUND WATER

The development of the law of ground water diverged into three major branches: the so-called common law rule, the American doctrine of reasonable use, and the correlative rights doctrine. All three doctrines exclude from their operation underground waters in streams with definite and known channels. Such streams are subject to the same rules which govern surface streams in the jurisdiction.[7] The three doctrines usually apply to all other ground waters. Ground waters are presumed to be percolating; to rebut this presumption, it is necessary to prove the existence of an underground stream.[8] Given the difficulty of such proof, the presumption usually carried the day.

The English, or common-law rule, which originated in Acton v. Blundell,[9] is that percolating waters belong to the owner of the overlying land in the same way that the soil belongs to him, and he may use such waters as he pleases, even waste them, regardless of the effect on his neighbor's water supply.[10]

The reasonable-use doctrine, which developed in America, also permits

use of percolating waters by a land owner to the injury of nearby water supplies, but is limited by the requirement that such use be reasonable.[11]

The correlative rights doctrine, which developed chiefly in California, limits the use of percolating water on overlying land to uses which do not interfere unreasonably with the uses of other landowners. Where the supply is not sufficient to satisfy the needs of all the overlying owners, each is limited to a proportionate share.[12]

III. THE LAW OF GROUND WATER IN OREGON - Early Case Law

In an early case, and the only one in Oregon directly in point, the Oregon Supreme Court held that a landowner could collect and divert water from an underground basin on his land without liability for a resulting decrease in flow of a spring on adjoining lands, because the owner of the land where the spring was located could not show that the water flowed to his spring in a well defined subterranean channel.[13] The applicable rules of law were said to be:

> Every proprietor of land through which flows a stream of water, has a right to the use of the water flowing in its natural channel without diminution or obstruction. (Wash. on Ease. 215.) The same rule applies to water which flows in a well defined and constant stream in a subterranean channel. (Angel on W.C., sec. 112; Wash. on Ease. 364); but it does not apply to water percolating through the soil or even flowing through an unknown and undefined channel. (Wash. on Ease. 210; Id. 364.) These rules, together with the maxim that every person may use his own property as he pleases, provided such use is not an injury to another, are, we think, all the principles of law necessary to a decision of the case.[14]

The dependence of the flow of the spring upon the source being diverted was not questioned. The only issue of "fact" which the court found it necessary to decide was whether the water percolated from one point to another, or flowed in a definite subterranean channel. No

channel being shown, the court presumed that the waters percolated and refused to interfere with "defendants' use and enjoyment of their own property."[15] This single case provides the basis for the statement that Oregon has adopted the so-called common law rule of absolute ownership of percolating ground waters.[16]

In 1923 the Oregon Supreme Court stated the general rule to be that subterranean percolating waters are

> . . . a constituent part of the land, and belong to the owner of the land, with the right in such owner to make any reasonable use thereof, including a use which, either by reason of its character or the manner of its exercise, cuts off or diverts the flow of percolating waters from his neighbor's spring and renders the same dry and useless.[17] (Emphasis supplied)

The subterranean water in that case was, however, found to constitute an underground stream, and thus subject to the rules governing surface streams.

In 1942 the Oregon Supreme Court quoted from Farnham's treatise the rule which it considered to be applicable to percolating water:

> The rule that one may make such reasonable use of his own property as he chooses, regardless of the effect on the percolating water, operates with full force although the effect is to destroy a spring on a neighbor's land, unless the spring is supplied by water flowing in a known channel.[18] (Emphasis supplied)

The court refused to enjoin a diversion of creek water which plaintiff claimed interfered with the flow of water from his springs. However, plaintiff was unable to demonstrate the existence of an underground stream as the source of the springs. He was also unable to show to the court's satisfaction that the creek water being diverted was a primary source of the springs.[19]

There is no discussion in the above two cases to indicate the

limitations which the court thought the word "reasonable" imposed.[20] It is apparent in both instances that the court's emphasis was on ownership and the rights of property, rather than on limitations. That the court considered the common-law doctrine to be the rule in Oregon is also apparent in Henrici v. Paulson[21] where the court quoted with approval a statement from Boyce v. Cupper[22]:

> The rule is general that the water percolating the soil beneath the surface, the course of which is unknown and unascertainable, belongs to the realty on which it is found.

Although Taylor v. Welch appears to have adopted the English or common law rule for determining rights to percolating waters, it has been suggested[23] that the subsequent Oregon cases can be said to have modified this by a "reasonable use" limitation, thereby giving the overlying owner only a usufructuary right to use ground water. No Oregon decision since Taylor v. Welch relies directly upon the English rule to support its holding. On the other hand, no Oregon decision has defined "reasonable use". These cases involved adjudicating rights to waters percolating from springs and were not, strictly speaking, ground water cases in any event. A separate statute recognizes a right in a landowner to the water of a spring, without having to appropriate it under the permit system, if the water does not leave the owner's land and become a part of a watercourse.[24]

Perhaps the only relevance of Taylor v. Welch today is that it affords a basis, however unfounded, for a constitutional challenge to the Oregon Ground Water Act of 1955. This Act broadly defines ground water as any water, except capillary moisture, beneath the surface of land or beneath surface water, specifically including percolating water.[25] The policy declaration in the statute states that "the right to reasonable control of all water within the state from all sources of supply belongs to the

public. . ."[26] Although the statute is worded in terms of public control rather than public ownership,[27] the policy stated by the legislature clearly rejects the concept that percolating waters are "private property" and subjects such waters to the permit system and to the regulatory controls contained in the Act.

Several court challenges have arisen in the context of the State Engineer's determination of a critical ground water area and the stringent state controls over ground waters, including percolating waters, which are permissible under that determination.[28] Unfortunately, none of these challenges at the trial court level has been resolved in an appellate decision. The State Engineer would be in a more secure position in the administration of the Ground Water Act if a constitutional challenge could be heard and resolved by the Oregon Court of Appeals. In other jurisdictions, several statutes do provide for the appropriation and control of percolating waters and such statutes have been upheld as constitutional.[29]

Thus after nearly 100 years Taylor v. Welch, whatever its true meaning, remains as a troublesome relic which perpetuated the unscientific distinction between subterranean streams and percolating waters and in dictum applied to the latter the rule of property law that the owner "owns" everything which lies beneath the surface of the land.[30] In an analogous situation, the Oregon Supreme Court upheld the legislative abolition of inchoate riparian rights to surface waters.[31] However, riparian rights were considered a usufruct by case law and the legislature recognized a vested riparian right under the 1909 Water Code as one which had been actually applied to beneficial use and not abandoned for a period of two years.[32] There is no line of cases as to percolating waters in Oregon which consider the right a mere usufruct rather than as part of the realty.

Further, the protection of vested rights is more circumscribed in the Ground Water Act of 1955 - it is measured by the maximum, actual and lawful beneficial use at any time within two years prior to August 3, 1955.[33] Thus the analogy to the abolition of inchoate riparian rights is not entirely a faithful one. Although the Ground Water Act expresses the public interest in the regulation of a basic natural resource and is more in accord with hydrology, it does pose the question whether the legislature can convert the alleged ownership of all water within the soil (except underground streams) into an appropriative right measured solely by actual use within the two years prior to the effective date of the Act.

IV. THE GROUND WATER CODE OF 1927

In 1927 Oregon enacted its first statute providing for the appropriation of ground waters.[34] It applied only to counties lying east of the Cascade Mountains (the arid portion of the state) and made a permit from the State Engineer the sole method of acquiring a right to use ground water. Prior economical and beneficial use of ground water was treated as a vested right and protected by statute. In 1933, the statute was amended to apply only to waters "found in underground streams, channels, artesian basins, reservoirs or lakes, the boundaries of which may reasonably be ascertained."[35] It has been suggested[36] that this amendment was in response to a New Mexico case[37] which raised (without deciding) the question of whether an appropriation statute could constitutionally apply to other ground waters, e.g., percolating waters. The 1927 Act, as amended in 1933, was never construed by the Oregon Supreme Court.

In 1953 the Oregon Legislature authorized the Governor to appoint an interim committee to study the water resources of the state.[38] The

report of this committee[39] noted than an estimated 100,000 wells were in use in Oregon for domestic and stock watering purposes and that new wells were being drilled at the rate of 5,000 annually. Irrigation was the principal user of ground water, 50,000 acres being irrigated wholly by ground water in 1950. In addition, ground water furnished the public supply for about 250,000 people. With ample justification, the committee concluded that the 1927 ground water code was not adequate to provide for the orderly development and control of the state's ground water resource in the future.[40]

The next legislative assembly accepted the committee's recommendations and enacted a comprehensive Ground Water Act in 1955.

V. ANALYSIS OF THE GROUND WATER ACT OF 1955

A. Introduction

The objectives of the Act may be summarized as follows:[41]

(1) Water rights. Rights to appropriate ground water within the state are to be based on beneficial use and determined of public record through a system of registration, permits and adjudications.

(2) Conservation. Reasonably stable ground water levels are to be maintained and wells are to be regulated. Waste, pollution, declining ground water levels, and interference with existing rights are to be prevented or controlled through voluntary joint action or by the State Engineer.

(3) Information. The location, capacity and quality of ground water resources are to be determined by the State Engineer.

No person or public agency can use any ground water or construct a well except in compliance with the Act which applies statewide.[42] A permit system is established for any person or public agency intending to acquire a new right or to enlarge upon an existing right.[43] An application, which must contain detailed information,[44] when approved by the State Engineer, constitutes a permit to appropriate which has priority from the

date the application was filed.[45]

The State Engineer is charged with the responsibility of investigating the location, extent and other characteristics of ground water reservoirs in the state.[46] Ground water rights can be adjudicated following a statutory procedure analogous to surface water adjudications.[47] In addition to regulatory powers incident to the permit system, the State Engineer can invoke extensive conservation measures once a critical ground water area is determined.[48] Authority is vested in the State Engineer to license water well contractors and machine operators[49] and to establish standards for the construction and operation of wells.[50]

Although the comprehensive Ground Water Act was enacted 46 years after the Surface Water Code of 1909 in Oregon, it does follow the general pattern of the earlier law. The differences between the laws are important, however, and relate primarily to the greater powers of the State Engineer to regulate the use of ground waters in the interest of conservation. The basic scheme remains the same - that private rights may be established as a matter of record in the exploitation of a public natural resource through compliance with an administrative allocation procedure. The differences lie not so much in the allocation of the resources, which still depends largely upon decentralized initiative, both public and private, but in the higher level of public interest expressed in the Ground Water Act (as contrasted to the Surface Water Code) in the state's control of the use of ground waters to meet the general objective of conservation.

B. Public Records as to Ground Water Rights - Registration

To meet the objectives of gaining information about ground water use and reducing ground water rights to public record, the Act provides for a system of registration, permits and adjudication. Permits issued under the 1927 Ground Water Act are recognized as permits under the new Act.[51] In

addition, lawful application of ground water is recognized as an appropriative right to the extent of the maximum beneficial use thereof at any time within two years prior to August 3, 1955, when registered with the State Engineer. In addition, the Act protects well projects under construction on the effective date of the Act, when completed and registered.[52]

The registration statements were required to contain detailed information and to be submitted to the State Engineer by August 3, 1958 -[53] later extended through a petition procedure to May 29, 1962.[54] The State Engineer issued a certificate to each registrant. The effect of registration of ground water rights thus recognized as vested on August 3, 1955 is variously described in the Act as:[55]

(1) the registrant is prima facie entitled to a right to appropriate the ground water and apply it to beneficial use to the extent disclosed in the registration statement and certificate.

(2) no certificate is a final determination of any matter stated therein.

(3) the right of the registrant is subject to later determination under the adjudication procedure and is not final or conclusive until so determined.

(4) a right under a certificate has a tentative priority from the date when the construction of the well was begun.

Failure to file a registration statement by the deadline "creates a presumption that any such claim has been abandoned."[56] Presumably this presumption could be overcome in an adjudication proceeding, although statutory standards are lacking as to the nature of the presumption.

The Ground Water Act differs from the earlier Surface Water Code in that (1) vested rights to ground water are more circumscribed and (2) such vested rights to ground water must be registered to avoid a presumption of

abandonment. Surface water rights, although based on beneficial use, were not limited to those so used within a specified period prior to February 24, 1909, the effect date of the Surface Water Code.[57] The only limitation was that "such use has not been abandoned for a continuous period of two years."[58]

Although both the Surface Water Code and the Ground Water Act contemplate that vested rights as defined in the respective statutes will be finally determined of record in adjudication proceedings, the Surface Water Code has never included a provision for registration of early rights pending an adjudication. In this regard the Ground Water Act is a major improvement because it provided a mechanism both to reduce pre-Act alleged vested rights to a public record and to preserve the evidence as to such claims. No such public record exists as to claims to early vested rights on surface streams in Oregon which are not adjudicated.

On the other hand, the registration of ground water claims may serve to lessen the pressure for final determination of such claims in adjudication proceedings. Such proceedings are expensive and must compete for funding before the legislature. After nearly 20 years of experience under the Ground Water Act, no adjudication of a ground water reservoir has occurred in Oregon. History may prove that the largely self-serving registration statements become the measure of the claims to ground water asserted therein, for practical purposes, despite the legal definition of such statements as "prima facie" only and "not conclusive" until adjudication.

Some registration statements were submitted to the State Engineer for wells constructed east of the Cascades, where the 1927 Act applied, between May 28, 1927 and August 3, 1955, but no permit had been applied for under the 1927 Act. The Oregon Attorney General stated that registration under the 1955 Act was limited to "lawful" application of ground water to beneficial

use and such use was "unlawful" on the face of the registration statement because not in compliance with the 1927 Act.[59] Therefore, the State Engineer could not issue a certificate of registration. No mention was made by the Attorney General of the problem raised by the 1933 Amendment - that appropriation under the earlier Act was limited to waters ". . . found in underground streams, channels, artesian basins, reservoir or lakes, the boundaries of which may reasonably be ascertained."[60] Although a current permit could be applied for as to uses represented by rejected registration statements, it is probable that some such wells continue in use in eastern Oregon without registration, permit or adjudication. The biennial reports of the State Engineer do not reveal that any special effort has been made to determine what wells in eastern Oregon were subject to but not in compliance with the 1927 Act.

C. The Permit System

Any person or public agency intending to acquire a new right to appropriate ground water or to enlarge upon any existing right, except for exempt uses, must apply to the State Engineer for a permit.[61] Detailed information must be submitted by the applicant about the proposed well project. An approved application constitutes a permit to appropriate the ground water.[62] The anti-speculation objective of the due diligence doctrine is incorporated in the Act, requiring the permit holder to commence construction within one year and to complete the project with reasonable diligence, not to exceed two years from the date of the permit unless an extension of time is granted by the State Engineer.[63]

Two separate provisions require that for all wells completed or altered after August 3, 1955, substantial information be submitted to the State Engineer. The first provision requires that proof that an appropriation

has been perfected by a permit holder be submitted as a condition to issuance of a water right certificate by the State Engineer.[64] This proof relates to the depth of the water table, the type, diameter, and capacity of the well and is contained in the permit holder's certificate of completion of the project. The second and more general provision requires that any water well contractors, person or public agency constructing or altering a well, submit a log within 30 days of completion of the project to the State Engineer.[65] The log "shall show" the location of the well, the kind of casing used, the flow, the static water level, the drawdown and the temperature of the ground water, as well as geologic information.[66]

These log reports are very important in the accumulation of data about the nature of Oregon's ground water resources. The number of log reports, indicative of the number of wells completed, has increased gradually each year from about 2,000 a year in 1956 to over 6,000 a year since 1972. In total, over 70,000 well logs have been reported to the State Engineer since the 1955 Act went into effect. Increasing reliance is being placed upon ground water supplies, despite the abundance of surface water in portions of the state, and it has been estimated that nearly "25% of all water consumed in the state" is ground water.[67]

In passing upon applications for a permit to appropriate ground water, the State Engineer is given broad discretion to approve an application for less water than applied for or to approve an application "upon terms,conditions and limitations necessary for the protection of the public welfare, safety and health."[68] More specifically, the State Engineer may impose conditions or limitations or reject an application or initiate a critical ground water area proceeding whenever:

(1) the application discloses the probability of waste or undue interference with existing wells, or

(2) the proposed use or well will impair or substantially interfere with surface water rights.[69]

The statute thus recognizes the inter-relationship between surface and ground water and authorizes a hearing when the State Engineer believes that a proposed well "will conflict with existing rights to appropriate surface or ground water."[70] In fact, the statute flatly prohibits permits which would deprive those having "prior rights" of the amount of water to which they are entitled,[71] and authorizes a protest by the holders of such prior rights against the issuance of such a permit.[72] (Presumably, the protest would be followed by a hearing.)

In acting upon applications for permits, there is a significant difference in the law between surface and ground water applications. As to surface water applications, if it is the judgment of the State Engineer, following a hearing,[73] that the proposed use would prejudicially affect the public interest, he shall refer the application to the State Water Resources Board.[74] The "public interest" is defined with some specificity in ORS 537.170(3), the most important ingredient being the Board's policy as formulated under ORS 536.300 to 536.350. However, as to ground water applications, the 1955 Ground Water Act does not provide for the "public interest" standard nor for the referral of applications to the State Water Resources Board. Although an application for ground water may be approved on terms and conditions "for the protection of the public welfare, safety and health,"[75] this vague standard is not defined and specific standards relate primarily to protecting existing water rights. In lieu of a broader "public interest" standard in allocating water resources, the general approach of the Ground Water Act of 1955 is to substitute the authority of the State

Engineer to determine critical ground areas and invoke his powers thereunder in the interest of conservation as to the use of such ground waters. Given the desirability of dealing with critical ground water areas separately, there still appears little justification for not applying the "public interest" standard to both ground and surface water permit applications.

In a broader sense, this problem involves the relationship between the State Water Resources Board and the State Engineer as to control over ground waters.

D. State Water Resources Board and the State Engineer - Control Over Ground Waters.

The 1955 Legislative Assembly which enacted the Ground Water Act also created a State Water Resources Board.[76] The legislature declared that it was in the interest of the public welfare that a coordinated, integrated state water resources policy be formulated and carried out under a single state agency. The legislation was a break from the special purpose legislation of the past which relied for its implementation upon a variety of state agencies with fragmented jurisdictions over water resources.

In planning the future use of the unappropriated waters of the state, the State Water Resources Board has the responsibility of conducting inventory studies of water resources and issuing program statements based upon such studies which classify water resources, including "underground reservoirs", as to their highest and best use and which specify preferences for future uses.[77] These program statements (which an attorney would identify as "rule making") are binding on other state agencies.[78]

Pursuant to this legislative charge, the Board issued program statements as to the Deschutes and Upper Willamette River Basins which had the

effect of limiting future ground water uses to domestic and livestock purposes in these basins unless the Board granted a variance.[79] The Oregon Attorney General was asked whether the legislature intended to place this control over ground water in the Board in view of the Ground Water Act of 1955.[80]

Despite the fact that the legislature had expressed the general policy that the state water resources program be coordinated under a single state agency (i.e., the Board) and that water resources subject to the Board's jurisdiction were defined to include ground waters, the Attorney General concluded that the same legislature specifically permitted the control over ground waters to remain in the State Engineer under the extensive powers granted him in the Ground Water Act. Although the Board's program statements were considered defective on other grounds in this particular case, the clear implication of the opinion is that the State Engineer need not comply with or follow such statements of the Board insofar as they attempt to classify, restrict future uses, or withdraw from appropriations the unappropriated ground waters of the state. This conclusion means that the planning and conservation function as to ground waters resides in the State Engineer as a special exception to state policy expressed in the act creating the State Water Resources Board. In the author's opinion this is a doubtful and perhaps unfortunate conclusion - doubtful as a matter of legislative intention and unfortunate over the long haul as a continuation of the single special purpose legislative approach which fragments agency jurisdiction over water resources. The Attorney General's opinion is long on the technical rules of construction and short on an analysis of the Acts involved and an attempt to reconcile them. On the other hand, it is recognized that the 1955 Legislative Assembly did fail to give adequate attention to the relationship of the new Ground Water Act

(and the special powers of the State Engineer) with the general responsibilities and powers of the new Board over all unappropriated water resources in the state. This issue is perhaps worthy of further empirical and legal research.

E. Uses Exempt from Public Recording

No registration or permit is required for the use of ground water for

(1) stockwatering purposes

(2) watering any lawn or noncommercial garden not exceeding one-half acre in area

(3) single or group domestic purposes in an amount not exceeding 15,000 gallons a day, and

(4) any single industrial or commercial purpose in an amount not exceeding 5,000 gallons a day.[81]

However, such exempt uses are nonetheless recognized as appropriative rights to the extent "beneficial".[82] Despite the exemption of these uses from the registration and permit system, they are not exempt from the other provisions of the Ground Water Act. By its terms the provision for adjudication of ground water rights does not exempt these uses and in fact requires the State Engineer in his order to determine "the nature of the use of the ground water allowed for <u>each</u> well."[83] (Emphasis supplied) The only hint that exempt uses may not be subject to adjudication is contained in the requirement of personal notice which is limited to those known to be claimants to ground water from the State Engineer's records.[84] However, the personal notice requirement would not appear to circumscribe the general obligation of the State Engineer "to make a final determination of the <u>rights</u> to appropriate the ground water of any ground water reservoir in the state."[85] (Emphasis supplied) Uses exempt from registration or permits are

clearly recognized as "rights". A separate issue may be raised whether constructive notice to exempt users satisfies due process requirements.

In the second place, exempt uses are not excepted from the specific regulatory powers of the State Engineer once a critical ground water area is determined.[86] In the third place, exempt uses are not excepted by the terms of other provisions pertaining (1) to the reports[87] and logs[88] of well contractors about wells they construct, and to (2) the general supervisory and regulatory powers of the State Engineer over ground water rights.[89] In the fourth place, the regulatory provisions of the Ground Water Act specifically include exempt uses in three instances: (1) the State Engineer may require exempt users to "furnish information" with regard to their use,[90] (2) the State Engineer may discontinue or impose conditions on defective wells, including exempt wells, which are wasteful or polluting or interfering with other wells,[91] and (3) the State Engineer may enter upon lands to inspect wells, including exempt wells.[92]

This last provision about entering lands to inspect all wells is troublesome because it specifically includes exempt wells, whereas the other regulatory powers which are granted to the State Engineer in the same statute[93] (requiring that flowing wells be capped, prescribing standards for well construction, etc.) do not specifically include exempt wells. This raises the obvious question whether the legislative intent is to exclude by inference the exempt wells from the regulatory measures (except inspection) contained in this statute. This seems a doubtful interpretation because inspection would serve little purpose if it could not be followed by corrective measures and the enforcement of well standards.

It may be seriously questioned whether it was and is sound state policy to exempt these ground water uses from the registration and permit

system. Such uses involve many wells and a considerable quantity of water. Farm wells for stockwatering and domestic use are virtually all exempt. As to domestic supply wells, 15,000 gallons a day seems an inordinately large quantity of water to be exempt. Exempting these wells from the registration process means that the objective of gaining full information about ground water sources and uses is frustrated as to pre-1955 uses. Exempting these wells from the permit system as to post-1955 uses has the same objection and in addition removes these wells from the initial control point under the administrative allocation procedure. In view of the fact that exempt uses are still subject to a variety of regulatory measures (either specifically or by implication) as discussed above, it is difficult to understand a rationale for not subjecting them to the registration and permit procedures.

F. Adjudication of Ground Water Rights

The Ground Water Act of 1955 establishes an adjudication procedure analagous to surface water adjudications.[94] In view of the detailed treatment of the latter in a separate publication[95] issued as a part of this study, ground water adjudications need be mentioned only briefly, especially since no such adjudications have occurred in Oregon. The objective of an adjudication is to make a comprehensive determination of all the ground water rights in a "reservoir", which determination is concluded in a court decree.

The only recognition of the physical relationship of ground and surface water is the requirement that notice be served in the ground water adjudication upon any person known to be a claimant to surface water within the area in which the ground water reservoir is located.[96] Although the statute is silent as to the purpose of such notice, presumably it is to

allow a surface water claimant to "contest" claims to ground water which affects or interferes with the surface supply. Only ground water rights may be "determined" in the decree, however.

There is one important distinction between ground and surface water adjudications. As to ground water adjudications, the statute permits "rules" to be promulgated in the "order of determination" which provide for "controlling the use of ground water" and "serviceable methods of withdrawal" and "construction, operation, and protection of wells" in the ground water reservoir under adjudication.[97] Presumably then, an adjudication decree could contain specific rules for the management of the particular ground water reservoir. No such statutory authorization exists for "rule making" in a surface water adjudication decree.

G. Critical Ground Water Area

The State Engineer is given discretion to initiate a critical ground water area proceeding whenever he has reason to believe that ground water levels are declining excessively or the wells interfere substantially with one another or the supply is being overdrawn or is polluted.[98] Additional reasons to initiate a proceeding are stated in the statute outlining the State Engineer's possible responses to an application for a permit to appropriate ground water. These reasons include the probability of "wasteful use" or substantial interference with surface water rights.[99] Following notice and hearing, if the State Engineer finds any of the circumstances to be true and the public welfare, health and safety require that corrective controls be adopted, then he may declare a critical ground water area. The corrective control measures which the

State Engineer may invoke are extensive. They include closing the area to future appropriations, setting withdrawal limits on wells, specifying preferences for domestic and other uses or a rotation system, all without reference to well priority dates, and closing pollution causing wells.[100]

Five critical ground water areas have been identified in Oregon since 1955.[101] In Cow Valley in northern Malheur County annual pumpage has been limited to stabilize declining water levels. Near the Dalles, the State Engineer's order of a critical ground water area was stayed by the Circuit Court for six years (1960-1966). Water from a Bureau of Reclamation project has subsequently alleviated the ground water situation in that area. In the Ordnance-Buttercreek area near the McMary Dam on the Columbia River, water levels are declining rapidly during the irrigation season and steps are currectly underway to invoke controls by the State Engineer. A similar situation exists in the Bull Mountain area in the Tualatin Basin of Washington County where municipal and irrigation wells have caused a decline of 40 feet or more in the water level. The necessity for and the value of the critical ground water proceeding already has been amply demonstrated in Oregon.

H. Regulatory Controls

The State Engineer examines and licenses both water well contractors and drilling machine operators. Considerable reliance must be placed upon contractors for proper well construction and submitting accurate well logs. Standards for the construction and maintenance of wells have been issued by the State Engineer.[102] Although 185 wells were inspected during the 1970-72 period, policing and enforcement of these standards in the field is a significant problem because of the heavy burden put on the small

staff of hydrogeologists and other professionals in the Groundwater Division of the State Engineer's office.[103] In fact, with a reasonably effective ground water law now in existence in Oregon, this specific problem is only part of the over-all problem of adequate funding to administer and enforce the law. The Ground Water Act contains adequate legal authority for the State Engineer to establish and enforce well standards and conservation measures and to police well contractors.[104]

VI. ADMINISTRATION OF THE GROUND WATER ACT

A. Interference with Other Uses

The State Engineer has the difficult task of determining when a well substantially interferes with another well or with existing surface water rights for the purpose of a critical ground water determination. He also has the task of estimating the probability of such substantial interference with existing rights for the purpose of conditioning, limiting or rejecting permit applications.

No reported court decisions exist in Oregon on the extent a senior groundwater appropriator's means of diversion is protected against a junior use. The Act does prohibit a permit which would deprive a senior appropriator of ground or surface water of the amount of water to which he is entitled.[105] However, this drastic situation must be distinguished from the typical situation of a declining ground water table caused by new wells coming into production. The senior appropriators are not deprived of the amount of water to which entitled but are put to added costs of pumping. In view of the fact that the statute requires that interference with existing rights must be substantial or undue in nature to support administrative action by the State Engineer, it does not appear that a senior appropriator has any legal right to have the water table

maintained at the level at which he first strikes water. "Substantial" or "undue" interference is not defined either in the statute or by case law, however. An administrative determination by the State Engineer for the purpose of denying or limiting a permit application or for the purpose of a critical ground water area proceeding is unlikely to be overturned on judicial review. A suit for injunction or damages by a senior appropriator whose water use is now less economical because of "interfering" junior uses would present for the first time in Oregon an issue which has not received uniform judicial treatment in other jurisdictions.[106] It is not even certain that "substantial interference" as the statutory basis for administrative intervention by the State Engineer would be applied as a basis for liability in a private suit for judicial relief in Oregon.

B. Administrative Activities of the State Engineer

A summary of some activities of the Ground Water Division of the State Engineer's office is reported here to illustrate the range of responsibilities which the Ground Water Act places upon that office.[107] This summary is given for the fiscal years 1970-72. Actual ground water management using computers and other sophisticated techniques such as recharging supplies and inter-relating ground and surface water supplies is only in its infancy in Oregon. Management thus far under the Act has taken the limited form of screening permit applications, establishing and attempting to enforce well standards, licensing well contractors and drillers, and delineating several critical ground water areas. Of particular importance for future guidance and state supervision of ground water resources is the growing body of information made available through the various requirements of the Act.

During the period from July 1, 1970 to July 1, 1972, the Ground Water

Division received 592 applications for permits, issued 262 permits, and granted 357 certificates representing rights perfected in accordance with the terms of the permits. By far the biggest single use of ground water represented by these permits and certificates was for irrigation. Examinations as part of the licensing procedure were given to 84 water well contractors and 123 drilling machine operators. Standards for the construction and maintenance of wells were revised and 36 administrative hearings were heard in regard to violations of these standards and the Ground Water Act. Over 6,000 well logs were received and processed each year. Progress was made in delineating several new critical ground water areas.

Disseminating information to the public and serving as an informal consultant concerning ground water resources and proposed projects have become important and time consuming activities for the Ground Water Division. During the busy summer period the office received about 400 phone calls and personal visits and over 100 letters requesting information and advice each summer month in 1970 and 1971. Local government agencies requested information, particularly in the formulation of land use plans, in regard to such matters as ground water for community and domestic supplies and susceptibility of shallow ground water bodies to pollution by septic tank effluent and sewage lagoon seepage. The Division cooperated with the Oregon Department of Environmental Quality in the investigation of solid waste disposal sites and their potential impact on water quality. Sanitary landfills have become increasingly important as a way of disposing of wastes formerly burned in Oregon, but such wastes are now prohibited from burning in order to achieve clean air standards. The alternative disposal method shifts the environmental pressure from air to water resources.

In addition to information obtained from the water well logs, periodic monitoring of nearly 800 wells in the state is conducted under an observation program to determine ground water levels. Basin investigations under the State Engineer's responsibility to identify the "location, extent, depth and other characteristics of each ground water reservoir in the state"[108] have progressed slowly but are now proceeding with the assistance of Title III matching funds under the federal Water Resources Planning Act of 1965.

This brief summary of activities in the administration of the Ground Water Act of 1955 during the most recent period for which statistics are available is ample evidence of the importance of the Act to the people of Oregon in the proper exploitation and utilization of a basic resource.

GROUND WATER DATA FROM OREGON STATE ENGINEER'S
REPORTS FROM AUGUST 3, 1955

Biennium	Applications	Permits		Certificates
		Number	Quantity in cfs	Quantity in cfs
1955-56	309	234	278 irrigation 44 all others	38 irrigation 21 all others
1956-58	622	550	432 irrigation 135 all others	105 irrigation 18 all others
1958-60	747	705	385 irrigation 164 all others	244 irrigation 18 all others
1960-62	585	543	459 irrigation 96 all others	264 irrigation 30 all others
1962-64	530	510	428 irrigation 132 all others	213 irrigation 45 all others
1964-66	646	450	375 irrigation 70 all others	80 irrigation 45 all others
1968-70	765	838	936 irrigation 551 all others	265 irrigation 48 all others
1970-72	592	262	502 irrigation 1243 all others	200 irrigation 27 all others

FOOTNOTES

1. Tolman, C. F., Ground Water, 190 (1937).

2. See, e.g., Chatfield v. Wilson, 28 Vt. 49 (1853).

3. 2 Kinney, A Treatise on the Law of Irrigation and Water Rights, Sec. 1152 (2nd ed. 1912).

4. Hutchins, Selected Problems in the Law of Water Rights in the West, 1 (1942).

5. Id. at 182-265.

6. It is generally considered to have originated in the case of Acton v. Blundell, 12 M. & W. 324, 152 Eng. Rep 1223 (1843).

7. 2 Kinney, Sec. 1155; 3 Farnham, Sec. 944; Hutchins at 151.

8. 2 Kinney, Sec. 1165; Hutchins at 154.

9. 12 M. & W. 324, 152 Eng. Rep. 1223 (1843).

10. 2 Kinney, Sec. 1189; 3 Farnham, Sec. 936.

11. 2 Kinney, Sec. 1191; 3 Farnham, Sec. 938; Hutchins at 158-59. Hutchins notes at 158: "No western supreme court which has been called upon repeatedly to decide controversies between landowners over a common supply of ground water has continued to adhere to the doctrine of absolute ownership and absence of limitation to reasonable use."

12. 2 Kinney, Sec. 1192; Hutchins at 159-60.

13. Taylor v. Welch, 6 Or 198 (1876).

14. Id. at 200.

15. Id. at 202.

16. It was the opinion of Hutchins in 1942 that the common law rule was the law of Oregon at that time (with the exception of certain waters in eastern Oregon covered by statute, discussed infra) Hutchins at 245-246.

17. Hayes v. Adams, 109 Or. 51, 57, 218 P. 933 (1923).

18. Bull v. Siegrist, 169 Or. 180, 186, 126 P. 2d 832 (1942).

19. Id. at 187.

20. See Comment, Real Property - Water Law in Oregon - Percolating Waters, 30 Or. L Rev 257, 259-60, for a discussion of various possible applications of the phrase "reasonable use."

21. 134 Or 222, 225, 293 P. 424 (1930).

22. 37 Or. 256, 260-61, 61 P. 642 (1900).

23. Rights to Underground Waters in Oregon: Past, Present and Future, 3 Willamette Law Journal 317, 324 (1965).

24. ORS 537.800 (1973), interpreted in Fitzstephens v. Watson, 218 Or. 185, 194, 344 P. 2d 221 (1959).

25. ORS 537.515 (3) (1973).

26. ORS 537.525 (1973).

27. The surface water act, dating from 1909, does state that "all water within the state from all sources of water supply belongs to the public," ORS 537.110 (1973).

28. ORS 537.735 (1973). See the Thirty-third Biennial Report of the State Engineer (1968-1970) at 47; Rights to Underground Water in Oregon, 3 Willamette Law Journal 317 (1965) at footnote 20.

29. Williams v. City of Wichita, 190 Kan. 317, 374 P. 2d 578 (1962), appeal dismissed for lack of a substantial federal question, 375 U.S. 7, rehearing denied, 375 U.S. 936 (1963).

30. Tolman and Stipp, Analysis of Legal Concepts of Subflow and Percolating Waters, 21 Or. L. Rev. 113 (1942).

31. In re Hood River, 114 Or. 112, 227 Pac. 1065 (1924).

32. ORS 539.010 (1973).

33. ORS 539.585 (1973).

34. Or. Laws 1927, c. 410.

35. Or. Laws 1933, c. 263.

36. See Comment, 30 Or. L. Rev. 257, 261-262 (1951).

37. Yeo v. Tweedy, 34 N.M. 611, 286 Pac. 910 (1930).

38. Or. Laws 1953, c. 658, sec. 4(2).

39. Report of the Water Resources Committee 19-20 (1955).

40. Id. at 67-69.

41. ORS 537.525 (1973).

42. ORS 537.535 (1973).

43. ORS 537.615 (1973).

44. Ibid.

45. ORS 537.625 (2) (1973).
46. ORS 537.665 (1973).
47. ORS 537.670 - .700 (1973).
48. ORS 537.730 - .740 (1973).
49. ORS 537.747 - .762 (1973).
50. ORS 537.780 (2) (1973).
51. ORS 537.575 (1973).
52. ORS 537.595 (1973).
53. ORS 537.605 (1973).
54. ORS 537.605 (6) (1973).
55. ORS 537.610 (1973).
56. ORS 537.605 (1) (1973).
57. ORS 539.010 (1973).
58. Ibid.
59. 29 Ore. Attorney General Biennial Report 25 (1958-60).
60. Gen. Laws of Or. 1933, Ch. 263, sec. 1.
61. ORS 537.615 (1973).
62. ORS 537.625 (1973).
63. ORS 537.630 (1973).
64. ORS 537.630 (2) and (3) (1973).
65. ORS 537.765 (1973).
66. ORS 537.765 (2) (1973).
67. Thirty-fourth Biennial Report of the State Engineer (1970-72) at 43.
68. ORS 537.620 (4) (1973).
69. ORS 537.620 (3) (1973).
70. ORS 537.622 (2) (1973).
71. ORS 537.620 (4) (1973).
72. ORS 537.622 (1) (1973).

73. ORS 537.180 (1973).

74. ORS 537.170 (1973).

75. ORS 537.620 (4) (1973).

76. Gen. Laws of Oregon 1955, ch. 707.

77. ORS 536.300 to 536.340 (1973).

78. ORS 536.360 (1973).

79. ORS 536.370 to 536.390 (1973).

80. 30 Ore. Att'y Gen. Biennial Report 426 (1960-62).

81. ORS 537.545 (1973.

82. Ibid.

83. ORS 537.685 (8) (1973).

84. ORS 537.670 (2) (1973).

85. ORS 537.670 (1) (1973).

86. ORS 537.735 (1973).

87. ORS 537.762 (1973).

88. ORS 537.765 (1973).

89. ORS 537.777 (1973).

90. ORS 537.545 (1973).

91. ORS 537.775 (1973).

92. ORS 537.780 (4) (1973).

93. ORS 537.780 (1) through (7) (1973).

94. ORS 537.670--537.700 (1973).

95. Easkin, Adjudication Provisions Under the 1909 Water Code, 50 Or. L. Rev. 664 (1971).

96. ORS 537.670 (2) (1973).

97. ORS 537.685 (4) (5) and (6) (1973).

98. ORS 537.730 (1973).

99. ORS 537.620 (3) (1973).

100. ORS 537.735 (1973).

101. Thirty-fourth Biennial Report of the State Engineer (1970-72) at 49-54.

102. Oregon Administrative Rules, Sec. 119.

103. Supra note 101 at 46.

104. ORS 537.747 to 537.795 (1973).

105. ORS 537.620 (4) (1973).

106. Chadsey, Rights to Underground Water in Oregon, 3 Willamette L. Jr. 317, 329 (1965).

107. Thirty-fourth Biennial Report of the State Engineer, (1970-72), pages 42-70.

108. ORS 537.665 (1973).