

ECONOMIC IMPLICATIONS OF THE OREGON  
GROUND WATER LAWS

by

HARVEY KEITH WARRICK

A THESIS

submitted to

OREGON STATE COLLEGE

in partial fulfillment of  
the requirements for the  
degree of

MASTER OF SCIENCE

June 1957

APPROVED:

Redacted for privacy

Assistant Professor of Agricultural Economics

In Charge of Major

Redacted for privacy

Head of Department of Agricultural Economics

Redacted for privacy

Chairman of School Graduate Committee

Redacted for privacy

Dean of Graduate School

Date thesis is presented April 22, 1957

Typed by Margaret Ann Dodd

## ACKNOWLEDGEMENT

It seems a pleasant task to express my appreciation to those who, in diverse ways, assisted in the work and preparation of this thesis, but there is the disconcerting thought that, by the inadvertant omission of a name from the many, I might seem ungrateful. The risk must be taken, in order that the following, at least, may be named:

To Dr. Emery N. Castle, my major professor, for his guidance, valued criticism and extra hours spent that this thesis might be completed; these contributions were deeply appreciated, but valued more is his sincere friendship;

To Professor D. Curtis Mumford, for his prompt suggestions which added to the clarity and value;

To Professor Kenneth J. O'Connell, of the University of Oregon Law School, for his counsel on procedure and legal interpretation;

To Miss Miriam Hall, for her fine suggestions in improving the readability and clarity;

To the typist, Mrs. Margaret Dodd, for her painstaking effort which is responsible for the accurate form;

To my wife, Rosie, for her encouragement, understanding, patience and assistance during the preparation of the thesis and for her hours spent typing and retyping the rough draft;

My most sincere thanks.

## TABLE OF CONTENTS

CHAPTER		Page
I	INTRODUCTION . . . . .	1
	Purpose of the Study . . . . .	7
	Methodology . . . . .	7
II	REVIEW OF LITERATURE AND DEVELOPMENT OF ECONOMIC CRITERIA . . . . .	10
	The Heady-Timmons Position . . . . .	11
	Wantrup's Economic Criteria Concepts . . . . .	13
	Security of water rights and protection of investment . . . . .	15
	Interpretation of flexibility of water rights . . . . .	16
	The contribution of economics . . . . .	17
	Summary of Papers Reviewed . . . . .	19
	Economic Criteria for Water Use . . . . .	20
	Security implications . . . . .	20
	Flexibility implications . . . . .	21
	Other criteria that will allow for maximum use . . . . .	22
III	STATUTORY GROUND WATER LAWS IN OREGON . . . . .	23
	The Law of 1909 and Prior Legislation . . . . .	25
	The Law of 1927 as Ammended in 1933 . . . . .	28
	The Ground Water Act of 1955, Chapter 708 . . . . .	36
	Purpose of act . . . . .	36
	Definition of words used . . . . .	38
	Rules governing permits . . . . .	38
	Powers and duties of the State Engineer . . . . .	39
	Protection of public interest provision . . . . .	42
	Water use may be changed . . . . .	42
	Act Establishing the State Water Resources Board, Chapter 707 . . . . .	43



## Table of Contents - Continued

Chapter		Page
	Definitions of words used in	
	the act . . . . .	44
	Powers and duties of board . . . . .	44
	Board to aid state engineer . . . . .	47
IV	COMMON LAW . . . . .	49
	Riparian Doctrine . . . . .	50
	History of Appropriation Rule . . . . .	51
	Importance of Source of Supply . . . . .	52
	Underground Water Definitions . . . . .	54
	English or Common Law Doctrine . . . . .	57
	The application of the English doctrines in America . . . . .	60
	American Doctrine . . . . .	62
	California Correlative Rights Doc- trine . . . . .	68
	The role of common law . . . . .	73
	Justification of correlative rights . . . . .	76
	California correlative rule refined . . . . .	78
	Oregon Cases . . . . .	83
	Taylor v. Welch . . . . .	83
	Boyce v. Cupper . . . . .	85
	Hayes v. Adams . . . . .	88
	Present Ground Water Law and Case Law . . . . .	89
V	SUMMARY . . . . .	96
	Security Implications . . . . .	96
	Flexibility Implications . . . . .	101
	Other Criteria That Will Allow for Maximum Use . . . . .	104

Table of Contents - Continued

Chapter

Page

BIBLIOGRAPHY . . . . . 109

# ECONOMIC IMPLICATIONS OF THE OREGON GROUND WATER LAWS

## CHAPTER I

### INTRODUCTION

I would like to make a special mention of programs for making the best uses of water, rapidly becoming our most valuable natural resource, just as it can be, when neglected, a destroyer of both life and wealth.

...the domestic and industrial demands for water grow far more rapidly than does our population.

The whole matter of making the best use of each drop of water from the moment it touches our soil until it reaches the oceans, for such purposes as irrigation, flood control, power production and domestic and industrial uses clearly demands the closest kind of cooperation of partnership between municipalities, state and the Federal Government. (65, p. 11)

Water as a resource, often taken for granted and given little thought, this year rose to the limelight when it was included in the President's State of the Union message. The increasing importance of water's role in the development of the nation was dramatized by the emphasis given to this resource in his message. Water has not been unnoticed through the years, but the concern over its use is rapidly growing more apparent.

In 1955 the Oregon Legislative Assembly passed two bills dealing with water control and use. Chapter 707, 1955 Oregon Law, creates a State Water Resources Board and prescribes its functions. Chapter 708 relates to the control and use of ground water. The first section of chapter

707 indicates an awareness of the importance of the resource and a need for future planning.

Section 1. (I) The Legislative Assembly recognizes and declares that:

*Conclusion*

(a) The maintenance of the present level of the economic and general welfare of the people of this state and the future growth and development of this state for the increased economic and general welfare of the people thereof are in large part dependent upon a proper utilization and control of the water resources of this state, and such use and control is therefore a matter of greatest concern and highest priority. (53, p. 1)

This action by the state was necessitated by the increased demand for water. Not only is the population growing, but per capita consumption is increasing as well. Modern sanitation, air conditioning and automatic washing machines are making heavier demands on the water supply. The trend toward a greater percentage of the population becoming urban dwellers has caused increased water consumption in concentrated areas. Although the number of farms continues to decrease, the number of acres under irrigation has increased. These trends are likely to continue. In the five year period, 1945-1950, the seventeen Western states added an average of over a million irrigated acres per year. The backlog of reclamation work, delayed by the war, accounted for some of this rapid growth. During the five years following 1950, it is estimated the average rate of increase was about half that of the preceding five. (73, p. 247)

Several factors are probably responsible for this cut back in reclamation development. The drop in prices paid to the farmer for his products may be partially responsible. The land most advantageous to irrigate was developed first. Future reclamation development will be more expensive and time consuming. However, plans for new areas of development continue to be presented. This indicates probable increase in the number of acres.

Supplemental irrigation is a relatively new development in the humid areas. These areas usually receive sufficient annual rainfall to support sustained production of crops and pasture. Additional water has increased crop yield, improved quality, provided earlier maturity and maintained pasture grazing capacity during critical periods. Improved irrigation equipment and better information on crop moisture needs have favored increases in supplemental irrigation. If the present trend continues this practice is a real potential as a competitor for water in the future. (73, p. 252)

An adequate supply of water can be a great asset to a locality for attracting new industry. In many cases the availability of water can be the strategic factor in locating a plant site. As the nation becomes more highly industrialized the need for a useable supply of water becomes more critical. This is illustrated by the following data:

Table 1. INDUSTRIAL REQUIREMENTS FOR WATER

Product	Unit	Total quantity of water required to produce one unit
		Gallons
Synthetic rubber	Ton	600,000 <sup>2</sup>
Aluminum	Ton	320,000 <sup>1</sup>
Pulp wood (soda)	Ton	85,000 <sup>3</sup>
Steel (finished)	Ton	65,000 <sup>3</sup>
Paper	Ton	39,000 <sup>3</sup>
Kilowatt hour	K.W. Hour	6,000 <sup>2</sup>
Refined oil	Barrel	770 <sup>3</sup>
Beer	Barrel	470 <sup>3</sup>

Sources: 1. Jordon (38, p. 65) 2. Davidson (20, p. 77) 3. President's Report (62, p. 178)

Water is essential to both industry and urban areas. Our standard of living depends upon a highly industrial urban society. Therefore, unless wise use is made of our water resources, we may not be able to maintain our present standard of living and certainly not continue the present rate of growth. Pollution and salt water encroachment are already threats to some areas. Defiled water supplies are believed to have had disasterous effects on some highly developed ancient civilizations. The irrigation water supply, a lifeblood for the civilization, was rendered useless by salt water encroachment. This is a theory held by Dr. A. Nelson Sayre of the Geological Survey concerning the civilization of the Tigris-Euphrates Valley. He feels that the soil may have become unproductive which greatly weakened the nation, even before the invasion by the Mongols. (73, p. 626) The once great Pima culture, found in central

Arizona about 1100-1300 A.D., is believed to have had as much as 250,000 acres under irrigation at one time. Water-logged soils caused by irrigation and lack of drainage plus accumulation of salt in the soil, are possible reasons for the Pima's decline. (73, p. 627) With man's present knowledge it is highly unlikely our society will completely crumble, but unwise use may result in costly correction measures.

Water regulations are not unique to the modern world. Ancient people also developed codes to govern water use and users. A very elaborate code of social laws, developed 4000 years ago, included some water laws that are very similar to our present ones. Under the ruler Hammurabi, a great king of the Babylonian Empire, water laws were greatly emphasized. A use preference was included in his code which gave the first right to man and beast. The second was for household use; irrigation was third and navigation fourth. Penalties were decreed on those who wasted water or on those who through carelessness allowed water to damage the property of others. (19, p. 189)

Regulations and rules are seldom popular. Traffic signal lights can be very annoying if one is in a hurry. However, the realization of the hazards of driving without controls results in their acceptance. Analogous to this are water laws.

The two bills referred to earlier, 1955 Oregon Law

chapter 707 and 708, have delegated a great deal of authority to the State Engineer and to the newly created State Water Resources Board. The State Board has been charged with several responsibilities. A few of these are of particular interest because of their implications. Section 10 subsection 3(b) of Chapter 707 reads:

It is in the public interest that intergration and coordination of uses of water and augmentation of existing supplies for all beneficial purposes be achieved for the maximum economic development thereof for the benefit of the state as a whole:

(c) That adequate and safe supplies be preserved and protected for human consumption, while conserving maximum supplies for other beneficial uses.

The State Engineer was also given an important decision making power. Section 27 of Chapter 708 gives the State Engineer the power to apportion the available supply among users. This task may be accomplished on the basis of priority of appropriation or the beneficial uses he feels are advisable under the circumstances, without reference to relative priority.

Applications for unappropriated ground water are to be sent to the State Engineer for approval or rejection. Section 2 of subsection 3 gives the criteria on which to base decisions. "Beneficial use without waste, within the capacity of available sources, is the basis, measure and extent of the right to appropriate ground water." (54)

The basis for appropriation in both bills hinges on



determining beneficial use. This responsibility could also be stated as the allocation of a limited water resource among the users with maximum social satisfaction as a goal. If the above statement is a correct interpretation of the intent of the legislators the law now contains the terminology and problem that concern economists.

The responsibility of allocating resources is obviously a very important and difficult task. This is what economists have been writing about for over a century so it is only natural their interest has been aroused by these two bills.

#### Purpose of the Study

A plan of action, regardless of its merits, is not too valuable, if there are limitations which make it impossible to implement. One, ever present, limitation is whether or not an action is legal. The statutory law and past case experiences fix definite boundaries governing the extent to which recommendations may be made in the use of ground water. The purpose of this study is to analyze, from an economic viewpoint, the legal framework relating to ground water. It is hoped the lawful possibilities of allocating ground water can be determined.

#### Methodology

The method used in the economic analysis of the legal

framework was to set up pertinent economic criteria and then investigate the law. Conferences were held with those in the field of law. General treatises on the subject were reviewed as well as journal articles and general discussions by those concerned with this phase of the water situation. The two segments of the law, statutory and common, which the courts use in deciding the cases were studied rather extensively.

Court procedure is to first refer to statutes. If there are no statutes pertaining to the problem or coverage by the statute is inadequate, the court then turns to common law for guidance. Common law has developed from centuries of past court decisions on similar or analogous situations. Our states have based their common law on the English common law. Of course, the states have interpreted and applied the English common law differently. This has resulted in precedents that vary between states. A state first follows the precedent set in its own jurisdiction. However, if there have been no past cases on the subject or none that closely fit the situation the court may refer to the rulings of other states.

The statutes of Oregon which are believed to have an influence on the allocation of water have been reviewed and included. This analysis will give much attention to the common law which has played a very important part in the past. An attempt will be made to draw some conclusions

regarding the possible future of ground water allocation and development in Oregon. These conclusions will be based on the review of the two segments of law on which the legal framework is built.

## CHAPTER II

## REVIEW OF LITERATURE AND DEVELOPMENT OF ECONOMIC CRITERIA

Economic criteria were needed in this analysis of the legal framework regulating ground water. The economic implications of water policy and law have been the subject of some recent writings by economists. Two papers concerned with the economics of water allocation and legislation will be reviewed. The limitations of each paper and the contribution each makes for the purposes of this thesis are presented. Economic criteria developed by the writer for the analysis are presented in the final section of this chapter.

The approach of Professors Heady and Timmons will be reviewed first. Their paper is concerned primarily with the economic framework for planning efficient use of water. The Heady-Timmons models suggested are better suited for administrators who allocate water than for legislators. Lawmakers need broader concepts when developing water laws. They need to also be aware of the problems in planning efficient use of water.

These broader concepts are included in a paper by Professor Wantrup. His is the second paper to be reviewed. The concepts he presents may be used as economic criteria for a system of water rights. He criticizes the use of the social satisfaction curve proposed by Professors Heady and Timmons.

### The Heady-Timmons Position

"The purpose of this paper is to develop and outline economic framework for planning and legislating efficient use of water resources." (25, p. 47)

According to Heady and Timmons, (25), the problem of water use involves a combination of physical, legal and economic inter-relationships. Economic principles should be the foundation on which legislation is based. The proposed economic goal would be to maximize long-run social welfare from water resources. If this goal in the use of water is to be realized, two major conditions must be attained:

1. The efficient allocation of water between the competing uses to maximize the social product.
2. The equitable distribution of the product or income of this resource among individuals within the sector considered.

Contributing to the above major conditions are two side conditions:

1. The legal and physical means must allow reasonable certainty in the use of water and the distribution of its benefits.
2. The possibility of gradual change to allow diversion of water uses to meet changing preferences of society.

Heady and Timmons center their position on the first major condition.

Three steps necessary to attain efficient allocation are:

1. Determine the supply of water.
2. Determine the alternative uses and production possibilities.
3. Apply a choice criterion or yardstick in determining which uses are most important and in line with relative wants and desires of the consuming society.

Heady and Timmons believe the application of the choice criterion often leads to a combination of uses rather than a single use. They deduce further that neither the riparian nor the appropriation doctrines have sufficient flexibility to allow optimum resource utilization.

Normally, the pricing mechanism is considered to be the choice criterion (step 3). This assumes prices reflect the relative importance the consumer places on the various products. Not all uses of water can be determined in the market place. It may be possible to calculate returns from irrigation and power production. However, it is difficult to place a value on such intangible water uses as recreation or the minimizing of flood damages to say nothing of human consumption.

Even though the pricing mechanism is inadequate, Heady and Timmons would not discard choice criterion principles. Legislative bodies and communities must find other means to measure the relative value of water uses when market prices are not available. "Ordinarily, optimum choices will be effected with some combination of price (e.g. as in letting farmers select in allocating water between crops) and legal

(e.g. as in priority for household over industrial uses) mechanisms." (25, p. 56)

A system of priority use was suggested. The highest priority would be water for human consumption and flood control to save human lives. As other water uses are considered their relative value classification is not as clear-cut.

"Highest marginal value product" would rule when alternatives move into the market place. "If each unit of water were allocated in terms of its marginal value product, a maximum addition to the social product would be guaranteed in water use." (25, p. 56)

They recognize equitable distribution of water income or products must be considered. However, means for attaining equity are not explored.

#### Wantrup's Economic Criteria Concepts

The emphasis of this paper is on relations in economics to water rights and policy. Professor Wantrup (17) gives consideration to the over-all system of water rights. He believes there are two sets of economic criteria. One set would be used as guideposts when developing laws or appraising existing laws. These he calls criteria "for" water laws. There are certain criteria implied in the laws by such terms as "beneficial use" and "maximum development". These he labels as criteria "in" the laws. The

public interest concept links criteria "for", with those "in" water law. Two main criteria are exemplified by concepts such as:

1. Those expressing security, protection and rigidity.
2. Those expressing flexibility, adaptability and insecurity.

These two concepts oppose one another in many respects. An institutional change may increase one set and decrease the other, yet this is not always the case. Analogous to this is order and freedom in democracy. The two criteria imply one of the most important and difficult problem areas in economic theory and policy. This is the problem area of economic change and of dynamics versus statics in economic discourse.

There has been an expressed need for students of law and economics to better understand the other's problems, tools and limitations. To do this, emphasis should be placed on the functional relations of concepts used as economic criteria "for" and "in" water laws. This may help to clarify areas of common interest between the two social science disciplines. By functional relations Wantrup means (a) what are the economic implications if concepts used as criteria "for" and "in" water laws are interpreted and applied in certain ways, and (b) to what extent and why are these implications helpful or obstructive if certain economic objectives are sought. "Economists are inclined



to disregard or underestimate the significance of legal uncertainty." (17, p. 297) When economists recognize legal uncertainty, they can then incorporate it into their economic analysis.

The economist interprets security or protection as (1) protection against physical uncertainty (e.g. supply and quality) (2) uncertainty of water tenure. To the student of law, security connotes protection against unlawful acts by others.

Preference classes based on purpose of water use have been used in allocating water. The highest preference (priority) class is that of domestic consumption and municipal use. The priority position of agriculture in relation to industry is questioned by Wantrup. Agriculture has in the past had higher priority. Recreational purposes have usually rated lowest. Some state statutes have not recognized recreational purposes as a reasonable or beneficial use.

#### Security of water rights and protection of investment.

From the public water policy standpoint, the aggregate investment is more important than the individual investment. "Adequate compensation" is considered as a part of investment implications. This may occur if the degree of protection against uncertainty is affected by prescription, preference and reservation. Some laws provide for compensation, others do not.

To argue in favor of protection of investment two conditions are necessary.

1. That the expenditures for durable assets are in the public interest, although they may not be economical for private users.
2. That the most economical alternative for public policy to develop water resource is a guarantee just sufficient to induce private development.

Benefit-cost analysis should be helpful in deciding whether protection of investment is economically warranted from the standpoint of public water policy. Ground water recharge should be included in benefit-cost analysis. The private user would not include this in his accounting.

Interpretation of flexibility of water rights. Legal uncertainty may be regarded as the price that must be paid for obtaining legal flexibility. The American evolution from Anglo-Saxon common law more closely approaches flexibility through trial and error and step by step, than other legal systems. This results in a shifting emphasis and reappraisal which cannot be predicted. Wantrup believes, such a condition is necessary for an effective contribution by the law to "social engineering".

He interprets the criterion, flexibility of water rights, as focusing on those aspects of water rights which facilitate or obstruct changes over time in allocation of water resources between regions, uses and users.

Factors in water rights affecting flexibility are:

1. Transferability of water rights.

2. Abandonment and forfeiture of water rights.
3. Involuntary transfer either by prescription or condemnation for public use. (Condemnation includes compensation.)

Concepts like reasonable use, maximum utilization and waste are continuously interpreted and reinterpreted by courts in the light of changing economic conditions. Sensitivity of the courts to changing conditions is a significant contribution to the flexibility of case or common law. The decisions are based on individual cases of controversy.

Courts are also directly involved with the transfer of water rights through eminent domain.

The contribution of economics. Wantrup accepts aggregate national income as a measure of change in economic welfare, provided the income distribution remains approximately the same.

Efficiency is the criterion of the maximization principle when applied to firm analysis. When the maximization principle is applied to the over-all objective of individuals and groups, it becomes, what Wantrup terms, scientific fiction. Scientific fiction serves a useful purpose if it is properly recognized as a deliberate conscious deviation from reality. There are two characteristics of scientific fiction: consciousness of its fictional nature, and conceptual usefulness. If these are obliterated it becomes mere dogma. (17, p. 310)

Wantrup believes economics can provide guides in

resource uses as witnessed by the following:

The emphasis of this approach is on minimum standards in resource use rather than on the optimum use; on establishing base levels rather than on locating peaks; on avoiding dead-end streets and on keeping direction rather than on computing the shortest distance; on mobility and adaptability of productive factors rather than on their optimum combination; on reducing institutional obstacles to water development rather than on maximum development; and on provisions in water law that facilitate changes over time in water allocation rather than an optimum water allocation at particular times and places. (17, p. 311)

This approach does not pretend to establish criteria for maximizing social satisfaction. But it offers effective direction signals for pursuing the public interest turn by turn.

Wantrup's position regarding law and economics are summarized in the following paragraphs.

Economics cannot define social optima which the law--as "social engineering" should aim to realize. What economics can do, however, is to explain why and how far certain conditions, which are decisively influenced by the law, facilitate or impede an increased national income. (17, p. 311)

A conflict may be recognized in economic terms before it has arisen in law as a controversy.

A first, but necessary step toward implementing such a relation between economics and law is mutual understanding with respect to the interpretation and application of key concepts used as economic criteria. In the area of water law, such concepts are security and flexibility of water rights. (17, p. 312)

### Summary of Papers Reviewed

The papers reviewed suggest various economic concepts and models for water allocation. Two areas of the water problem were considered. Professor Wantrup was primarily concerned with the broad over-all criteria for water policy and rights. He discussed the weaknesses inherent in the Heady-Timmons position. They were proposing economic framework for planning efficient use of water resources. This is a special case of the general problem.

The Heady-Timmons paper was presented at a seminar on water resources. The original draft was titled "Economic Framework of Planning and Legislating Efficient Use of Water Resources." Legislating, was deleted from the title when the paper was incorporated in the proceedings of the seminar. However, legislating still appears in the statement of purpose and is mentioned throughout the text. The paper would be far less vulnerable had they been content to deal with the allocation and use of water resources. This is the area where their proposals have potential usefulness. The "community indifference" curve is crucial to the model. It has not been demonstrated that such a curve can be determined empirically. Therefore it is of no value to either the formulators or the administrators of water law. This illustrates Wantrup's concern over glib use of scientific fiction.

The second paper is far more useful in presenting

criteria which can be used in forming water policy at the legislative level and in evaluating the existing law. The criteria of flexibility and security tend to be more dynamic and applicable to the general. The marginal analysis of the first paper can be useful for the special case and is static. Concepts of efficiency economics can be helpful to administrators faced with allocation choices at a given time and place. Opportunity costs of intangible uses and input-output ratios between alternatives give direction for making decisions. (16)

The law, both statutory and common, plays a major role in determining how the water will be used. This does not mean, however, that economic criteria may not be incorporated into the law.

### Economic Criteria for Water Use

From an economic standpoint water use law should be conducive to the most efficient use of water over a period of time. The writer believes there are two major concepts helpful in developing economic criteria for water use. They are security and flexibility. The following list of questions have been developed primarily from these broad concepts. The questions were the basis of the review of the statutory and case law affecting ground water use.

#### Security implications:

1. Does the law provide for security of tenure?  
(Security of tenure means protection against

variability over time of the quantity of water useable under the right due to lawful acts of others. These acts would include condemnation or prescription.)

2. How difficult or expensive is it to obtain the security of tenure?
3. Is expensive litigation needed in order to establish or hold these tenure rights?
4. What protection is there against the lowering of the water table to a point where use is no longer economical?
5. What protective measures are there to insure the quality of the water?
6. What provisions are there for compensation in case of condemnation? Is there a defined method for determining compensation?
7. Are the vested rights protected? What are these vested rights? Have there been cases where vested rights have been set aside for the good of society? What were the circumstances?
8. To what extent will first in time, first in use be applied to ground water use?

Flexibility implications:

1. Is there a system of priority uses? Does it allow for a higher use to take water from a lower use? Can specific use be designated within a general class?
2. Is there flexibility in the priority system to allow for change in taste and technology?
3. Has there been an interpretation of the state's police powers in changing water uses?
4. Can a water right be sold separately from the land or must the land be sold with it?
5. Once an appropriation has been granted for a given use can it be changed to another use without losing priority?

6. Does the law include provisions allowing the water use in this state to meet the needs of the over-all economic sphere of which it is a part? (Very important in the Columbia River Basin)
7. Are there "restrictive use" provisions?
8. Is there a system of leases for given periods which may be renewed if the use is beneficial at the end of the lease?
9. Can water be taken for use in distant lands?
10. What powers are given administrators in changing water use?

Other criteria that will allow for maximum use:

1. Are there provisions for storage of water during an over supply period for later use?
2. Are there any provisions to measure social costs and values not determined in the market place? If so, what method or methods are to be used and who is charged with the responsibility?
3. In many enterprises there is a minimum standard of size below which they cannot operate economically. During periods of scarce water supply, will absolute ownership or pro-rationing of water on an equitable share basis result in some of the units becoming uneconomical?
4. Does the law recognize the inter-relationship between ground and surface water?
5. What factors have been taken into consideration by the courts in determining "beneficial use", "reasonable use", "waste", "surplus", "maximum development", and "adequate compensation"? Once determined, these factors will be helpful in predicting future rulings of the courts.



## CHAPTER III

## STATUTORY GROUND WATER LAWS IN OREGON

The Oregon Legislature has passed numerous laws, over the years, regarding water use in the state. Major legislation was passed in 1909, 1927 and 1955. The 1927 law was amended in 1933. Since the courts first refer to the statutes governing a case in question, the pertinent sections of the law will be presented next.

Laws are written to cover the general field. The courts must apply them to specific cases which requires an interpretation of the statute. Naturally, these interpretations vary depending on the judge and the other circumstances.

In this chapter many of the statutes will be quoted verbatim rather than summarized or interpreted. This is to avoid the real danger of misinterpretation or deletion by the writer of some important implications in the law. With the inclusion of the original text the reader has the opportunity to judge for himself the merit of the economic implications suggested in the final chapter.

An example of debatable meaning and intent of law is found in a 1909 Act. Under the heading of the Appropriations of Water for Power Purposes, Chapter 221, paragraph 1 states: "All water within the state from all sources of water supply belongs to the public." This portion of the

act poses an extremely interesting and important question. Did the legislators actually intend to include all the waters within the state from all sources of water supply, or were they thinking only of the surface waters or streams which are mentioned in some of the following administrative provisions?

An interpretation of this statute could greatly influence future disputes concerning vested rights. Should the courts interpret this act to include underground water, property owners no longer held vested rights in underground water after 1909. The question can be argued either way. If the law were written in light of present hydrological knowledge of the interrelationship of ground water to streams, underground water would definitely be included.

The opposite opinion can also be defended. First, the language of the provisions following paragraph 1 indicate lawmakers were concerned only with surface water. Streams were mentioned specifically in sections 11 and 14, but never percolating water. Secondly, this act was passed in the days of the almost unquestioned reign of the absolute ownership doctrine. Under this doctrine, the owner had an unrestricted right to use the water found in his soil. If A suffered injuries resulting from the use of ground water on B's property, A could not collect damages. Lawyers and legislators of that day were undoubtedly orientated in the concept that underlying water was as much a part of

property as gravel or soil. At that time, underground water was of little economic importance so it was not creating any major problems. This is the third point in the argument. The final point is found in the extensive underground water act of 1927.

The 1927 statutes included the appropriation procedure for underground waters and mentioned irrigation several times. This act indicates it was not until 1927 that the underground waters were subject to appropriation. If this were true, did property owners lose their vested rights in underground water? This presents a constitutionality question. Does this violate the 14th Amendment to the United States Constitution forbidding the taking of property without due process of law? Oregon has not yet had a test case on this statute. This question will be dealt with in chapter four.

#### The Law of 1909 and Prior Legislation

The laws presented in this section were taken from Lord's Oregon Laws codified (43). Through the years the laws have been codified or gathered together by subject. The numbers appearing before the sections indicate the codified reference number. The year the bill was passed follows the section. Applicable parts of the 1909 law and other laws prior to that date follow.

Par. 6594 Water may be Appropriated for Beneficial Use--Limitation. Subject to existing

rights, all waters within the state may be appropriated for beneficial use, as herein provided, and not otherwise; but nothing herein contained shall be so construed as to take away or impair the vested right of any person, firm, corporation, or association to any water. (L. 1909, chap. 216, par. 1)

After the position of the state engineer was created in 1909, confusion and litigation over water rights was less likely to occur because these rights had to be filed in his office. Par. 6624-6634 made provisions for the appropriation of water. It included posting of the area and making application to and approval by the state engineer. (L. 1909, chap. 216, pars. 45-54)

Par. 6633 Water Right Certificate. ...Certificates issued for rights to the use of water for power development acquired under the provisions of this act shall limit the right or franchise to a period of forty years from date of application, subject to a preference right of renewal under the laws existing at the date of expiration of such franchise or right. (L. 1909, chap. 216, par. 53)

Par. 6668 Water Appurtenant to Land for Irrigation Purposes. All water used in this state for irrigation purposes shall remain appurtenant to the land upon which it is used; provided that if for any reason it should at any time become impractical 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 owner to the board of control. (L. 1909, chap. 216, par. 67)

Par. 6675 Insufficient Water, Preference Among Different Uses. When the waters of any natural stream are not sufficient for the service

of all those desiring the use of the same, those using the water for domestic purposes shall, subject to such limitations as may be prescribed by law, have the preference over those claiming such water for any other purpose, and those using the water for agricultural purposes shall have the preference over those using the same for manufacturing purposes. (L. 1893, par. 3, p. 150)

### Chapter III Appropriation of Water for Power Purposes

Par. 6575 Water Belongs to Public. All water within the state from all sources of water supply belongs to the public. (L. 1909, chap. 221, par. 1)

Par. 6595 Vested Rights Preserved. (2) Actual application of water to beneficial use prior to the passage of this act by or under the authority of the riparian proprietor, ... shall be deemed to create in such 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.

(3) The right to water shall be limited to the quantity actually applied to a beneficial use within the time so fixed by the board of control. (L. 1909, chap. 216, par. 70)

Par. 6532 Proceeding to Appropriate Water, Below Riparian Owners' Point of Diversion. ... Provided, that no person owning land lying contiguous to any natural stream shall, without his consent, be deprived of water for household or domestic use, or for the purpose of watering his stock, or of water necessary to irrigate crops growing upon such land, and actually used therefore. (L. 1891, par. 8, p. 54; L. 1901, par. 1, p. 136)

Par. 6525 Rental, Sale or Distribution of Water; Public Use; Franchise: The use of the water of the lakes and running streams of the state of Oregon, for general rental, sale of distribution, for purposes of irrigation, and supplying water for household and domestic consumption, and watering livestock upon dry lands of the state, is a public use, and the right to collect rates of compensation of such use, of said water is a franchise... (L. 1891, par. 1,

p. 52; L. 1905, chap. 104, p. 204)

Par. 6531 Manner of Proceeding to Condemn. --Compensation will be decided by the Circuit Court if agreement cannot be reached otherwise. (Surface water) (L. 1891, par. 7, p. 54)

The Law of 1927 as Ammended in 1933

The next major piece of legislation was passed in 1927. The wording of this law placed a heavy emphasis on irrigation. It was so pointed in its language that the Attorney-General upon request from the State Engineer interpreted the 1927 Act as follows: (48, p. 695)

June 17, 1932

Mr. Charles E. Stricklin,  
State Engineer

Dear Sir:

Under the date of 8th instant you requested my opinion as to whether or not the state engineer has authority to issue a permit to appropriate waters from a well in any county east of the summit of the Cascade Mountains for industrial and domestic uses, and fire protection, or any purpose other than irrigation.

The title of chapter 410, General Laws of Oregon 1927, which is codified as Chapter XIII of the Title XLVII, Section 47-1310 to 47-1311, inclusive, Oregon Code 1930, reads as follows: (The sections have been omitted. The amended sections appear later in the thesis.)

It is my opinion that the state engineer does not have the authority to issue permits for the appropriation of underground waters east of the summit of the Cascade Mountains for any other than irrigation purposes, and also to the right to appropriate for the purposes specified in

section 3 of the act.

I.H. Van Winkle,  
Attorney-General  
by Willis S. Moore,  
Assistant

The amendments made to the 1927 law in 1933 broaden the act to include uses other than irrigation. The records in the state engineer's office show that applicants refused during the period 1927 to 1933 were allowed to reapply and were granted permits.

The following review of the 1927 law includes the 1933 amendments. The amendment is described at the bottom of each paragraph affected.

#### Chapter XII Underground Water

Par. 47-1301 (50) Appropriation East of Cascades--Vested Rights Protected. Subject to existing rights, all underground waters of the state of Oregon in counties lying east of the summit of the Cascade Mountains may be appropriated for beneficial use, as herein provided, and not otherwise, but nothing herein contained shall be construed so as to take away or impair the vested right of any person, firm, corporation or association to use the water from any existing well or source of underground supply where such water is economically and beneficially used. (L. 1927, chap. 410, par. 1)

Par. 47-1302 (51) Permit for Such Appropriation. --Any person, firm, association or corporation hereafter intending to acquire the right to the beneficial use of any waters in counties lying east of the summit of the Cascade Mountains found in underground streams, channels, artesian basins, reservoirs or lakes, the boundaries of which may reasonably be ascertained, hereby are declared to be public waters and to belong to the public and subject to appropriation for any purpose other than for domestic and culinary use, for stock or for the watering of lawns and gardens not exceeding one-half acre in area, before commencing the construction of any well,

pit, gallery, tunnel, pumping plant or other means of developing and securing such water, or performing any work in connection with such construction, or in any manner utilizing said waters for such purpose shall make an application to the state engineer for a permit to make such appropriation. (L. 1927, chap. 410, par. 2; L. 1933, chap. 263, par. 1.) (Underlined portion indicates words added by 1933 amendment)

Amendment. The 1933 amendment deleted "underground" preceding the word "waters" in the fourth line; deleted "for irrigation purposes" following "Cascade Mountains"; and added the portion of the section between "Cascade Mountains" and "before commencing". (This part has been underlined.)

Par. 47-1303 (50) Application or permit for domestic use not required: Limitation as to the area. (L. 1927, chap. 410, par. 3)

Par. 47-1304 (51) Permit--Form of Application. --Every application for a permit to appropriate underground water under this act shall be in a form which shall be prescribed by the state engineer, and which shall set forth in definite terms the name and address of the appropriator, the location and manner of development, the use to be made of water and the amount of water necessary for such use, and if for irrigation, a description of the lands to be irrigated, ...the time of beginning and completion of work and such information as may be found by the state engineer to be necessary to properly classify and determine the feasibility of such appropriation. (L. 1927, chap. 410, par. 4; L. 1933, chap. 263, par. 2) (Underlined portion indicates words added by 1933 amendment)

Amendment. The 1933 amendment deleted "for irrigation purposes" following "underground water"; substituted the portion of the first sentence between "manner of development" and "the time of beginning" for "lands to be irrigated, the amount of water to be used per acre irrigated".

Par. 47-1305 (51) Applications--Records--Fees. Applications under this act for underground waters shall be accepted, recorded and approved by the state engineer under the same procedure adopted for applications for diversions of surface waters, as provided in sections



47-503 - 47-509, Oregon Code 1930. (L. 1927, chap. 410, par. 5; L. 1933, chap. 263, par. 3) Amendment. The 1933 amendment deleted "for irrigation purposes" following "underground waters".

Par. 47-1307 (50) Extent of Permit. --No permit shall be granted for development of underground or artesian waters beyond the capacity of the underground beds or formation in the given basin, district or locality to yield such water with a reasonable or feasible pumping lift in cases of pumping water developments, or with a feasible reduction of pressure in the case of artesian developments. The state engineer shall have the power to decide whether the granting of any such permit will injure or damage any vested or existing right or rights under prior permits, and may, in addition to the records of his office, require further evidence, proof and testimony prior to granting or denying any such permit. (L. 1927, chap. 410, par. 7)

Par. 47-1308 (51) Economical Use--Artesian Wells. --Permits to use water from an underground source shall be contingent upon its use in an economical and beneficial manner. The state engineer shall have the power to fix the maximum amount which may be used per acre of land each season or the amount which may be used for other purposes, and the water shall not be wasted. Artesian wells shall be provided with suitable means for closing and conserving the flow when not actually needed or put to beneficial use. (L. 1927, chap. 410, par. 8; L. 1933, chap. 263, par. 5) (Underlined portion indicates words added by 1933 amendment)

Amendment. The 1933 amendment added "or the amount which may be used for other purposes".

A second important aspect to the 1933 amendment was the additional wording to section 47-1302. (41, p. 261-262) The original act referred to only "any water" east of the Cascades. The 1933 amendment defined the classification of water included and declared those waters to belong to the public. The purpose of the amendment was probably an

attempt to fortify the constitutionality of the act. (32, p. 214) A New Mexico Supreme Court ruling most likely prompted the amendment. The New Mexico case, *Yeo v. Tweedy* 34 N.M. 611, 286 Pac. 970 (1930), was a dispute between the state engineer and property owners over the control of ground water use. The statute declared the underground water of artesian basins belonged to the state and the state had the right to control the use of such water. The court ruled the act unconstitutional, not because of the intent of the bill, but rather its form. The section regarding state authority to appropriate water, violated a provision that a law could not be revised or amended by reference to its title only.

The classification of the percolating water seems a bit awkward. It may be difficult to locate ascertainable boundaries. Mr. O. E. Meinzer (70, p. 148) of the U.S. Geological Service provides a reason for this terminology.

As a result of an intensive investigation of the Roswell artesian basin by the U.S. Geological Survey, in cooperation with the state engineer of New Mexico, the scientific facts regarding the occurrence of the ground waters of the area were thoroughly determined. Nevertheless, recognizing the strong influence that the precedent of earlier decisions has upon the course, the framers of the law were loath to disregard the more or less generally accepted legal terminology that had been supported by earlier decisions. Therefore, the law was made to apply to "the waters of underground streams, channels, artesian basins, reservoirs, or lakes, having reasonable ascertainable boundaries." It is understood that this terminology was intended to be sufficiently broad to include the so-called "percolating water" under the doctrine of

appropriation. Such a broad interpretation would seem to be justified because all bodies of ground water can be included under one or more of the terms "streams, channels, artesian basins, reservoirs, or lakes" and the boundaries of virtually all bodies of ground water can now be determined with reasonable accuracy.

...if the ground water constitutes a part of the stream before it appears as surface water, does not the same ground water constitute a part of the stream for purposes of appropriation. A careful consideration of all factors involved must lead to the conclusion that eventually, in many areas, the surface water rights--whether by court adjudication or by appropriation--must be evaluated in relation to the rights to use ground water, and vice versa.

Another interesting theory behind the 1933 amendment is an example of a method used by those in law. The 1927 act may have attempted to take property owners vested rights in percolating water found in the soil without due process of the law. Percolating waters have been defined as those which ooze, seep or filter through the soil beneath the surface "without a defined channel." The amendment covers only those waters whose boundaries are ascertainable. Mr. Meinzer indicates practically all underground water falls under the classification in the amendment. If this is the case, the landowner still has his vested rights in percolating water. However, he has no underground water which can be classified as percolating water. This demonstrates how the legislature and jurists adjust the law to fit changing conditions and yet remain within their constitutional limits.

This body of law was also responsible for an example

of possible pitfalls in interpretation. Information obtained from the state engineer's office regarding this incident may be helpful.

A landowner east of the Cascades insisted the state engineer issue him a permit. The water was to be used for domestic purposes only. The act states a permit is not required for a well supplying domestic or culinary needs. Therefore, the engineer was prohibited from issuing the permit because he was not given authority to do so. The engineer requested an opinion from the Attorney-General in order to quiet the persistent applicant.

The resulting opinion was quite startling. There seems to be two possible reasons for the misunderstanding. The assistant writing the opinion may have failed to consider the 1933 amendment and relied upon the 1932 opinion which he had also written. A portion of the 1932 opinion was presented earlier in this chapter on pages 28 and 29. The other possibility is that one paragraph was written so poorly that it created a false impression. Complicated, complex, unintelligible sentences appear to be a chronic condition in the field of jurisprudence. Whatever the reason for the confusion, the opinion is presented.

Headnotes expressing the main thoughts appear at the beginning of the case or opinions in many legal publications. This facilitates finding pertinent cases and opinions. The headnote for the 1942 opinion of the

Attorney-General (49, p. 635) reads:

The state engineer does not have authority to issue permits for the appropriation of underground waters east of the summit of the Cascade Mountains for any other than irrigation purposes.

Permits to appropriate such waters for irrigation purposes are subject to existing uses for domestic and culinary use, and for stock, or for the watering of lawns and gardens not exceeding one-half acre.

It is possible the person writing the headnote made the mistake. The text of the opinion follows.

June 5, 1942

Mr. Charles E. Stricklin,  
State Engineer

Dear Sir:

Under the date of May 18, 1942, you refer to section 116-445, O.C.L.A., and request my opinion on the following questions:

"(1) Is the State Engineer prohibited from issuing a permit to use underground water for any or all or any combination of the following purposes?

Domestic

Culinary

Watering lawns surrounding a residence

Watering the usual garden that is kept to supply the family of the owner or lessee."

"(2) Is the State Engineer prohibited from issuing two permits to use water from one and the same well?"

You further state that the well under consideration is situated east of the summit of the Cascade Mountains.

Sections 116-443, 116-444 and 116-445, O.C. L.A., provide: (Section 116-443 recognizes existing rights; 116-444 and 116-445 are the same as 47-1303 and 47-1304 appearing on page 30 of this thesis.)

In this connection please see my opinion to you of June 17, 1932, Opinions of the Attorney-General, 1930-1932, page 695, holding that the state engineer does not have authority to issue permits for the appropriation of underground waters east of the summit of the Cascade Mountains for any other than irrigation purposes, and that the issuance of permits for such purposes are required to be subject to existing rights to the use of such underground waters for other beneficial purposes, and also to the right to appropriate underground waters not otherwise appropriated for the purposes specified in section 3 of the act (section 116-445, O.C.L.A.).

It is my opinion that the answer to your first question is in the affirmative.

I.H. Van Winkle,  
Attorney-General  
by Willis S. Moore,  
Assistant.

The Ground Water Act of 1955, Chapter 708

The latest statutes to be passed are Chapters 707 and 708 of the 1955 Oregon Laws. Only certain parts of the acts will be reviewed here. Those parts of the acts not relevant to this analysis are omitted. Chapter 708 (54) relates "to the control and regulation of rights to appropriate, the manner of obtaining and the use of ground water."

Be It Enacted by the People of the State of Oregon:

Section 1. This Act shall be known as the "Ground Water Act of 1955."

Purpose of act.

Section 2. The Legislative Assembly recognizes, declares and finds that the right to reasonable control of all water within this state

from all sources of water supply belongs to the public, and that in order to insure the preservation of the public welfare, safety and health it is necessary that:

(1) Provision be made for the final determination of relative rights to appropriate ground water everywhere within this state and of other matters with regard thereto through a system of registration, permits and adjudication.

(2) Rights to appropriate ground water and priority thereof be acknowledged and protected, except when, under certain conditions, the public welfare, safety and health require otherwise.

(3) Beneficial use without waste, within the capacity of available sources, be the basis, measure and extent of the right to appropriate ground water.

(4) All claims to rights to appropriate ground water be made a matter of public record.

(5) Adequate and safe supplies of ground water for human consumption be assured, while conserving maximum supplies thereof for agricultural, commercial, industrial, recreational and other beneficial uses.

(6) The location, extent, capacity, quality and other characteristics of particular sources of ground water be determined.

(7) Reasonably stable ground water levels be determined and maintained.

(8) Depletion of ground water supplies below economic levels, impairment of natural quality of ground water by pollution and wasteful practices in connection with ground water be prevented or controlled within practicable limits.

(9) Whenever wasteful use of ground water, impairment of or interference with existing rights to appropriate surface water, declining ground water levels, interference among wells, overdrawing of ground water supplies or pollution of ground water exists or impends, controlled use of the ground water concerned be authorized and imposed under voluntary joint action by the State Engineer and the ground water users concerned whenever possible, but by the State Engineer under the police power of the state when such voluntary joint action is not taken or is ineffective.

(10) Location, construction, depth, capacity, yield and other characteristics of and matters in connection with wells be controlled in accordance with the purposes set forth in this section.

Section 35. This Act is intended to be supplementary and in addition to and is not intended to repeal...any law relating to the surface waters of this state.

Definition of words used.

Section 3. (1) "Constructing" a well includes boring, digging, drilling or excavating and installing casing, pump, and other works for withdrawal of water and measurement of depth to the water table.

(2) "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 or flows, percolates or otherwise moves.

(3) "Ground water reservoir" means a distinct body of standing or moving ground water having exterior boundaries which may be ascertained or reasonably inferred.

(6) "Well" means any artificial opening or artificially altered natural opening, however made, by which ground water is sought or through which ground water flows under natural pressure or is artificially withdrawn, provided, that this definition shall not include a natural spring.

Rules governing permits.

Section 5. No registration, certificate of registration, application for a permit, permit, certificate of completion or ground water right certificate under this Act is required for the use of ground water for stockwatering purposes, for watering any lawn or non-commercial garden not exceeding one-half acre in area, for single or group domestic purposes in an amount not exceeding 15,000 gallons a day or for any single industrial or commercial purpose in an amount not exceeding 5,000 gallons a day. The use of ground water for any such purpose, to the extent that it is beneficial, constitutes a right to appropriate ground water equal to that established by a ground water right certificate issued under section 21 of this Act. (Provision to determine rights to appropriate water within a ground water reservoir.) The State Engineer, however, may require any person or public agency



using ground water for any such purpose to furnish information with regard to such ground water and the use thereof.

Section 7 sets up the registration procedure for those claiming any right to appropriate ground water, which may be done within three years after the effective date of this Act. Failure to request registration within such period creates a presumption that any such claim has been abandoned. Detailed information is required such as use, depth of water table, amount, dates when well was begun and first beneficial use made, location of well and if for irrigation the description of the land irrigated.

#### Power and duties of the State Engineer.

Section 10. (3) When an application discloses the probability of wasteful use or undue interference with existing wells or that any proposed use or well will impair or substantially interfere with existing rights to appropriate surface water by others, the State Engineer may impose conditions or limitations in the permit to prevent the same or reject the same after hearing, or, in his discretion, initiate a proceeding for the determination of a critical ground water area under sections 26 to 28 (cited later) of this Act.

(4) An application may be approved for less ground water than applied for or may be approved upon terms, conditions and limitations necessary for the protection of the public welfare, safety, and health. In any event the application shall not be approved for more ground water than is applied for or than can be applied to a beneficial use. No application shall be approved when the same will deprive those having prior rights of appropriation for a beneficial use of the amount of water to which they are lawfully entitled.

Section 14. The State Engineer or his authorized assistant shall proceed as rapidly as possible to identify and define tentatively the location, extent, depth and other characteristics of each

ground water reservoir in this state and shall assign to each a distinctive name or number or both as a means of identification.

Section 15. (1) The State Engineer upon his own motion or, in his discretion, upon receipt of a petition therefor by any one or more appropriators of ground water from such ground water reservoir, may proceed to make a final determination of the rights to appropriate the ground water of any ground water reservoir in this state.

Subsections 2 and 3 set the procedure for conducting hearings.

The State Engineer is given power to stop wasteful use or interference with other wells or stop pollution in Section 25.

Section 26. (1) In addition to initiation under subsection (3) of section 10 (cited earlier) of this Act of a proceeding for the determination of a critical ground water area, the State Engineer upon his own motion or, in his discretion, upon receipt of a petition therefor by any ground water claimant or appropriator within the area in question, may also initiate such a proceeding whenever he has reason to believe that:

(a) Ground water levels in the area in question are declining or have declined excessively; or

(b) The wells of two or more ground water claimants or appropriators within the area in question interfere substantially with one another; or

(c) The available ground water supply in the area in question is being or is about to be overdrawn; or

(d) The purity of the ground water in the area in question has been or reasonably may be expected to become polluted to an extent contrary to the public welfare, health and safety.

(2) The State Engineer or his authorized assistant shall hold a public hearing on the question of the determination of a critical ground water area.

Well drillers are to be licensed by the engineer in

## Section 30.

Section 27. (1) If, at the conclusion of the public hearing held under section 26 of this Act, the State Engineer finds that any of the circumstances set forth in subsection (3) of section 10 of this Act if the proceeding is initiated thereunder, or in subsection (1) of section 26 of this Act if the proceeding is initiated thereunder, are true, and further finds that the public welfare, health and safety require that any one or more corrective controls be adopted, he shall by order declare the area in question to be a critical ground water area.

(2) The order of the State Engineer shall define the boundaries of the critical ground water area and shall indicate which of the ground water reservoirs located within the area in question are included within the critical ground area. Any number of ground water reservoirs which either wholly or partially overlie one another may be included within the same critical ground water area.

(3) The order of the State Engineer may include any one or more of the following corrective control provisions:

(a) A provision closing the critical ground water area to any further appropriation of ground water, in which event the State Engineer shall thereafter refuse to accept any application for a permit to appropriate ground water located within such critical area.

(b) A provision determining the permissible total withdrawal of ground water in the critical area each day, month or year, and, in so far as may be reasonably done, the State Engineer shall apportion such permissible total withdrawal among the appropriators holding valid rights to the ground water in the critical area in accordance with the relative dates of priority of such rights.

(c) A provision according preference, without reference to relative priorities, to withdrawals of ground water in the critical area for domestic and livestock purposes first, and thereafter other beneficial purposes, including agricultural, industrial, municipal other than domestic, and recreational purposes, in such order as the State Engineer deems advisable under the circumstances.

(d) A provision reducing the permissible withdrawal of ground water by any one or more appropriators or wells in the critical area.

(e) Where two or more wells in the critical area are used by the same appropriator, a provision adjusting the total permissible withdrawal of ground water by such appropriator or a provision forbidding the use of one or more of such wells completely.

(f) A provision requiring the abatement, in whole or in part, or the sealing of any well in the critical area responsible for the admission of polluting materials into the ground water supply or responsible for the progressive impairment of the quality of the ground water supply by dispersing polluting materials that have entered the ground water supply previously.

(g) A provision requiring and specifying a system of rotation of use of ground water in the critical area.

Protection of public interest provision.

Section 34. Any person who deems himself aggrieved by any order, rule or regulation of the State Engineer under this Act may appeal from the same to the circuit court of the county in which the property affected by such order, rule or regulation, or any part of such property, is situated. The appeal may be carried from the circuit court to the Supreme Court, and shall be governed by the practice in suits in equity. No order of the State Engineer shall be disturbed when there is substantial evidence to support it. No rule or regulation of the State Engineer shall be disturbed unless it is affirmatively made to appear that the same substantially and unjustly discriminates against the complainant to his prejudice and in favor of others similarly situated.

Water use may be changed.

Section 22. All ground water used in this state for any purpose shall remain appurtenant to the premises upon which it is used and no change in use or place of use of any ground water for any purpose may be made without compliance with a procedure as nearly as possible like that set forth in ORS 540.520 and 540.530. (The provisions for changing use and/or transferring rights of surface water.) However, the owner of any ground water right may, upon compliance with a procedure as nearly as possible like that set forth in ORS 540.520 and 540.530, change the use and place of use, the point of appropriation or

the use theretofore made of the ground water in all cases without losing priority of the right theretofore established.

Act Establishing the State Water Resources Board,  
Chapter 707

Chapter 707 (53) relates "to water and other natural resources, including provisions relating to creating and prescribing the functions of a State Water Resources Board."

Be It Enacted by the People of the State of Oregon:

Section 1. (1) The Legislative Assembly recognizes and declares that:

(a) The maintenance of the present level of the economic and general welfare of the people of this state for the increased economic and general welfare of the people thereof are in a large part dependent upon a proper utilization and control of the water resources of this state, and such use and control is therefore a matter of greatest concern and highest priority.

(b) A proper utilization and control of the water resources of this state can be achieved only through a coordinated, integrated state water resources policy, through plans and programs for the development of such water resources and through other activities designed to encourage, promote and secure the maximum beneficial use and control of such water resources, all carried out by a single state agency.

(c) The economic and general welfare of the people of this state have been seriously impaired and are in danger of further impairment by the exercise of some single-purpose power or influence over the water resources of this state or portions thereof by each of a large number of public authorities, and by an equally large number of legislative declarations by statute of single-purpose policies with regard to such water resources, resulting in friction and duplication of activity among such public authorities, in confusion as to what is primary and what is secondary beneficial use or control of such water resources and in a consequent failure to utilize and control such water resources for multiple purposes for the maximum beneficial use and

control possible and necessary.

(2) The Legislative Assembly, therefore, finds that it is in the interest of the public welfare that a coordinated, integrated state water resources policy be formulated and means provided for its enforcement, that plans and programs for the development of the water resources of this state be devised and promoted and that other activities designed to encourage, promote and secure the maximum beneficial use and control of such water resources be carried out by a single state agency which, in carrying out its functions, shall give proper and adequate consideration to the multiple aspects of the beneficial use and control of such water resources with an impartiality of interest except that designed to best protect and promote the public welfare generally.

#### Definitions of words used in the act.

Section 2. As used in sections 1 to 31 of this Act, unless context requires otherwise:

(1) "Board" means the State Water Resources Board created by section 3 of this Act.

(2) "Public corporation" includes any city, county or district organized for public purposes.

(3) "State agency" includes any office, board, commission or department of a state government.

(4) "State water resources policy" means the water resources policy provided for in section 10 of this Act.

(5) "Water resources of this state" or "waters of this state" means any surface or ground waters located within or without this state and over which this state has sole or concurrent jurisdiction.

(6) "Existing rights" or "vested rights" or words of similar import include inchoate rights to the use of water to the fullest extent that the same are recognized, defined or declared by any court within this state or by the State Engineer.

#### Powers and duties of board.

The Board consists of seven members appointed by the Governor, subject to approval by the Senate.

Section 10. (1) The board shall proceed as rapidly as possible to study; existing water

resources of this state; means and methods of conserving such water resources; existing and contemplated needs and uses of water for domestic, municipal, irrigation, power development, recreation, wildlife, and fish life uses and for pollution abatement and all other related subjects, including drainage and reclamation.

(2) Based upon said studies, the board shall progressively formulate an integrated, coordinated program for the use and control of all the water resources of this state and issue statements thereof.

(3) In formulating the water resources program under subsection (2) of this section, the board shall take into consideration the purposes and declarations enumerated in section 1 of this Act and also the following additional declarations of policy:

(a) Existing rights, established duties of water, and relative priorities concerning the use of the waters of this state and the laws governing the same are to be protected and preserved subject to the principle that all of the waters within this state belong to the public for use by the people for beneficial purposes without waste;

(b) It is in the public interest that integration and coordination of uses of water for all beneficial purposes be achieved for the maximum economic development thereof for the benefit of the state as a whole;

(c) That adequate and safe supplies be preserved and protected for human consumption, while conserving maximum supplies for other beneficial uses;

(e) Competitive exploitation of water resources of this state for single-purpose uses is to be discouraged when other feasible uses are in the general public interest;

(f) In considering the benefits to be derived from drainage, consideration shall also be given to possible harmful effects upon ground water supplies and protection of wild life;

(g) Whenever feasible and necessary, the maintenance of minimum perennial stream flows sufficient to support aquatic life and to minimize pollution shall be fostered and encouraged if existing rights and priorities under existing laws will permit;

(h) Watershed development policies shall be favored, whenever possible, for the preservation of balanced multiple uses, and project

construction and planning with those ends in view shall be encouraged;

(i) Due regard shall be given in the planning and development of water recreation facilities to safeguard against pollution;

(j) It is of paramount importance in all cooperative programs that the principle of the sovereignty of this state over all the waters within the state be protected and preserved, and such cooperation by the board shall be designed so as to reinforce and strengthen state control.

(k) Local development of watershed conservation, when consistent with sound engineering and economic principles, is to be promoted and encouraged; and

(1) When proposed uses of water are in mutually exclusive conflict or when available supplies of water are insufficient for all who desire to use them, preference shall be given to human consumption purposes over all other uses and to agricultural uses, including water for livestock, over any other use, and thereafter other beneficial purposes in such order as may be in the public interest consistent with the principles of this Act under the existing circumstances.

(6) Subject at all times to existing rights and priorities, the board:

(a) May classify and reclassify the lakes, streams, underground reservoirs or other sources of water supply in this state as to the highest and best use thereof for the future in aid of an integrated and balanced program for the benefit of the state as a whole; and the board may so classify portions of any such lakes, streams or other sources of supply separately;

(b) Shall diligently enforce existing laws concerning cancelation, release and discharge of excessive unused claims to water to the end that such excessive and unused amounts may be made available for appropriation and beneficial use by the public; and

(c) May, subject to existing rights and priorities and subject to the preferential uses named in paragraph (L) of subsection (3) of this section, prescribe preferences for the future for particular uses of the waters of any lake, stream or other source of supply in aid of the highest and best beneficial use thereof; and in so doing it shall give effect and due regard to...the economy of such streams or other sources of supply, the economy of the affected area, seasonal



requirements of various users of said water, the type of proposed use as between consumptive and non-consumptive uses, and other pertinent data.

Section 11. In the exercise of any power, duty or privilege affecting the water resources of this state, every state agency or public corporation of this state shall give due regard to the statements of the board and shall conform thereto. No exercise of any such power, duty or privilege by any such state agency or public corporation which would tend to derogate from or interfere with the state water resources policy shall be lawful.

The board is given power in Section 17 to represent the state and may discuss water policy and use with other states or agency and agencies within the state.

Section 20 allows that investigations, surveys or studies may be made by the board on its own or in cooperation with any interested agency.

Board to aid state engineer.

Section 36. ORS 537.170 is amended to read as follows:

537.170 (1) If, in the judgment of the State Engineer, the proposed use may prejudicially affect the public interest, he shall refer the application to the State Water Resources Board for consideration. The board shall hold a public hearing on the application on proper notice to the applicant and to any one objecting thereto. If, after the hearing, the board determines that the proposed use of the water sought to be appropriated would impair or be detrimental to the public interest, it shall enter an order rejecting the application or require its modification to conform to the public interest, to the end that the highest public benefit may result from the use to which the water is applied.

(2) In determining whether the proposed use would impair or be detrimental to the public interest, the State Water Resources Board shall have due regard for:

(a) Conserving the highest use of the water for all purposes, including irrigation, domestic

use, municipal water supply, power development, public recreation, protection of commercial and game fishing, fire protection, mining, industrial purposes, navigation, scenic attraction or any other beneficial use to which the water may be applied for which it may have a special value to the public.

(b) The maximum economic development of the waters involved.

(c) The control of the waters of this state for all beneficial purposes, including drainage, sanitation and flood control.

(d) The amount of waters available for appropriation for beneficial use.

(e) The prevention of wasteful, uneconomic, impracticable or unreasonable use of the waters involved.

(f) All vested and inchoate rights to the waters of this state or to the use thereof, and the means necessary to protect such rights.

(g) The state water resources policy formulated under section 10 of the 1955 Act by which this section was amended.

Section 37. ORS 537.200 is amended to read as follows:

537.200. An appeal may be taken from any order made by the State Engineer, pursuant to the provisions of ORS 537.150 to 537.190, rejecting or allowing any application in whole or in part by any person appearing before the State Engineer or State Water Resources Board as applicant or objector in respect to the application. The appeal shall be taken to the circuit court of the county in which the waters involved or some part thereof are situated. It must be taken within 30 days from the date of mailing a copy of the order of the engineer or water resources board to the applicant or objector. The appeal shall otherwise be governed by the practice in suits in equity. An appeal may be taken from the final order or decree of the circuit court to the Supreme Court.

## CHAPTER IV

## COMMON LAW

Common law plays an important role in the judicial process. The court hears the case and weighs the circumstances. The decisions are then made based on the merits of the case. Statutory law governs decisions if applicable laws exist. However, if there are conditions in the case not covered by statutory law, the court then depends on common or case law.

The common or case law is used by judges to support their opinions. Common law gives them a foundation and justification for their decisions. Past cases set the precedent for future ones. If the future is to be predicted with any accuracy, some past cases need to be reviewed. Occasionally cases arise which set the pace or precedent in a particular field of law. The ruling is often quoted in future cases. The circumstances and reasoning involved in these "classic" cases may establish a basis for better understanding of later cases and provide a reference point from which to observe the evolution of the doctrines. Also, it is well to remember the new laws may not be approved by the courts. They might be ruled unconstitutional and the common law would have to be relied upon when deciding future cases.

When water rights were first developed the waters were

divided into public and private classifications. Private waters were then divided into surface and subterranean. Subterranean waters were further classified into either underground water courses or streams, underground reservoirs, artesian waters and percolating waters. The terminology varies in the different jurisdictions.

Surface water (streams) and underground watercourses were often governed by one body of rules. All other underground waters not found in definite channels were governed by other rules.

### Riparian Doctrine

Riparian doctrine was accepted as the rule governing streams, both surface and underground east of the Mississippi. Riparianism traveled diverse paths to reach America. Its origin traces to the early Roman civilization surrounding the Mediterranean Sea which influenced French civil law. The Eastern states were completely influenced by the riparian doctrine. Two American jurists, Story and Kent, brought the doctrine from France to the Atlantic seaboard in the early 1800's. The courts in England accepted the Americans' discussion, and it was incorporated into English common law. Many states based their laws on English common law, and as a result riparian rights gained a permanent foothold in the Eastern and some Western states.

The second route was through Texas by way of Mexico as

part of the Spanish civil law. It was also influenced by the early Mediterranean codes.

The doctrine, in its early common law form, entitled the landowner bordering a stream, to the flow of the water as it had been accustomed to flow, undiminished in quantity and unpolluted in quality.

In colonial times water mills, floating logs and water transportation were important. Modification took place. The riparian owner was then allowed to make use of the water for domestic purposes and even for irrigation provided other riparian needs were filled in the same proportions. In some jurisdictions the upstream riparian may take all the water necessary for his domestic use even if he depletes the entire supply.

### History of Appropriation Rule

The riparian doctrine did not fit the arid West, so the appropriation doctrine was developed. It is interesting that similiar doctrines evolved from three separate independent areas.

The Mormons, just driven out of humid Illinois, developed a system of prior appropriation in arid Utah. The climate caused a change from riparianism to appropriation. Brigham Young (26, p. 41) made these comments in regard to water:

No man has the right to waste one drop of water which another man can turn into bread.

These (the waters) belong to the people; all the people. No man can gain title to more than he can use in a beneficial manner.

Non-riparian uses of water were evident in the Southwest prior to American sovereignty in the southwestern part of Colorado, New Mexico and Arizona.

The economic pressure of the gold rush in California was a major influence on the basic doctrine of appropriation. "First in time, first in right," was appropriate for the mining situation of that area.

Gold was not always located near a stream so water sometimes had to be diverted. A notice was posted which included the date, point of diversion and quantity. The first appropriator had the right to the posted quantity. If there were a surplus, the next could appropriate water and so on. In a period of short supply the first appropriator's right was supreme. Although it exhausted the supply, he had the superior right.

The soils for irrigation along the stream were not always the most productive. From a best use standpoint, it was therefore wise to allow use on non-riparian lands. This new doctrine illustrates man's ability to modify the laws to serve his purposes and to respond to such factors as economics, climate and soil types.

#### Importance of Source of Supply

Rules applied to surface and underground streams were

considered well settled by the courts during the 18th and early 19th century. For this reason, some of the cases cited made a desperate attempt to convince the court that the supply was from an underground stream rather than percolating. As the behavior of underground water is better understood, this distinction becomes less important. Geologists are attacking such a division. As they perfect their hydrological knowledge it is quite likely the courts will abolish the distinction.

For legal purposes subsurface water (without considering artesian water) is divided into two main classes, based on a difference (erroneously assumed) in methods of transmission through the ground, namely: (1) "percolating waters," and (2) "subsurface water courses." (70, p. 114)

The trend of the new water statutes is to recognize that underground water is a part of the entire water supply. Oregon's new statutes have recognized this. It seems that all are not convinced. In 1930, a court in Arizona (10, p. 406) gave a lengthy reason why percolating waters should not be subject to appropriation. They recognized that this could discourage further pumping for irrigation projects but felt that, "percolating waters were more or less uncertain as to their existence"... "and their behavior not known well enough to be able to establish any basis on which to give appropriation." With so much uncertainty attached they believed that only the legal profession would stand to gain as a great deal of litigation was foreseen. Maricopa County Municipal Conservation Dist. v. Southwest Cotton Co.

39 Ariz. 65, 4 Pac. (2nd) 369. (1930)

### Underground Water Definitions

The early courts description of and references to percolating or underground water will give the reader an appreciation of the problem faced. The following quotation is presented as an introduction to the definition section.

In the 17 Western states there are in the neighborhood of 200 court decisions (as of 1941) involving this subject. There are not only innumerable conflicts between the courts of the different jurisdictions, but frequently quite serious conflict between the decisions of the same jurisdictions. In addition there are not only conflicts as to questions of principle but also there are serious conflicts as to definition, classification and other related matters. For instance, in some states there seems to be one rule applied to the utilization of waters of underground streams and another as to percolating waters. (46, p. 2)

One of the classic definitions of percolating waters describes it as:

Those which ooze, seep or filter through the soil beneath the surface, without a defined channel, or in a course that is unknown or not discoverable from surface indications, without excavation for that purpose. (1, p. 585)

Other descriptions stress the unknown mystic ways of this water. In 1850 this description is given: (9, p. 1441)

It (percolating water) rises to great heights, and moves collaterally, by influences beyond our apprehension. These influences are so secret, changeable, and uncontrollable, we cannot subject them to the regulations of law, or build upon them a system of rules, as has been done with streams of the surface. Roath v. Driscoll, 20 Conn. 533

Percolating waters in their common-law sense



are vagrant, wandering drops, moving by gravity in any and every direction along the line of least resistance. (76, p. 1027) *Los Angeles v. Hunter* 105 Pac. 755. (1909)

...the secret, changeable and uncontrollable character of underground water in its operation is so diverse and uncertain that we cannot well subject it to the regulations of law, or build upon it a system of rules, as is done in the case of surface streams. (5, p. 1365)

These descriptions by the court indicate lack of knowledge. Court decisions from the humid area included economic factors as a reason for separate underground rule. A Pennsylvania ruling of 1863, *Haldeman v. Bruckhardt* 45 Pa. 514, is an example. (5, p. 1376) The court reasoned as follows: One may have invested heavily in equipment, to use his land in a husbandry-like manner. The use may unknowingly injure an adjoining owner. He may not be able to restore underground water to it's old passageway. The course of surface water is known. If the water flows underground in such a manner that its movement is unknown to both parties, how can there be an agreement as to or consent between the proprietors of the adjoining lands beneath which underground currents exist? This is one of the foundations on which the law pertaining to surface streams is built.

Should a lower proprietor have the right of an undisturbed supply of water which passes through his neighbors land, he has the power of preventing that neighbor from using the water flowing through his own soil. For if he cuts the flow he cannot return it to the old passageway as

is the case with surface water.

The far reaching consequence of interrupting a subterranean flow may involve numerous property owners in an area of several miles. The expense involved if this damage were actionable would inject such a great risk that few would dare improve their land or drain it.

Ground water rights and liabilities are often vague and the application of legal principles to them uncertain, due to the general inadequacy of visible surface indications and geological information to characterize the source and its movements. (44, p. 193)

This problem currently exists as indicated by the previous quote from a text published in 1954. (44)

The legal profession is aware of the problem that faced the early courts. Some of the later definitions are much broader.

"Subterranean waters," as used in the Restatement on this subject, comprehends waters which lie or flow under the surface of the earth and are not artificially confined. (2, p. 332)

Mr. Hutchins, (31, p. 157) who has made extensive studies of the water law in the Western states, gives a current definition.

Ground water defined, from the standpoint of water rights, as all water in the ground that is free to move by gravity, is capable of being extracted from the ground, and is susceptible of practical legal control.

Oregon has in past case history negatively defined percolating water by limiting it to water having no definite, known underground channel.

As the next cases are reviewed, the following should be kept in mind: (1) when many of the cases were heard there was a lack of knowledge of the extent and behavior of underground water, (2) water had less economic significance than it does today, (3) the cases pertained to diverse areas as far as physical characteristics are concerned.

The parent cases of the different doctrines are cited first and then the Oregon cases. The past rulings in the state are usually given the most weight by the courts in the same jurisdiction. When there is meager legal history the courts look for similar cases in other states. The precedents set in other states will also be presented. As previously warned, contradictory decisions will appear. The writer does not claim to be neutral when selecting cases. Rulings which relate to economic considerations will be given the greater emphasis.

#### English or Common Law Doctrine

It seems only logical to start with the father of this ground water drama--Acton v. Blundell, 152 English Reports 1223. (1843)

The story takes place in the mid-19th century in England. The industrial revolution was flexing its muscles. The need for water in factories and coal for power had entered the scene. Much of the original language of the

court will be used in order to convey the original meaning as accurately as possible.

FACTS: The wells on the land of the plaintiff (Acton), had been used to supply the needs of a cotton mill on his property. The wells had been rendered dry as the result of a coal mining operation on adjoining property. After the well first went dry, it was deepened and again filled the needs of the plaintiff's mill. The coal mine was taken to a greater depth and water again ceased to flow into the well.

ISSUE: First count--The disturbance of his (Acton's) right to certain underground springs, streams and watercourses, which ought to run, flow and percolate into the closes of the plaintiff...

Second count--...for the draining off the water of a certain spring or well of water in a certain close of the plaintiff, by reason of possession of ..closes.. he ought of right to have the use, benefit and enjoyment of the water of the said spring or well...

HELD: The inconvenience of his neighbor falls within the description of damnum absque injuria, (damages without injury, for such damages no legal action will lie) which cannot become grounds for action,

REASONING: We think the present case,...is not to be governed by the law which applies to rivers and flowing streams, but that it rather falls within that principle, which gives the owner the soil all that lies beneath his surface;..that the person who owns the surface may dig therein, and apply all that is there found to his own purpose at his free will and pleasure; and that if in the exercise of such right he intercepts or drains off the water collected from underground springs in his neighbor's well, the inconvenience to his neighbor falls within. (see above paragraph)

Parts of the pleas indicate the thinking at that time.

A great deal of law was quoted in Latin.

Mr. Cowling for the plaintiff:

The water is the party's as long as it is on his land, as everything is his that is above or below it. This is not disputed as to water flowing on the surface of the land, but the question is whether it makes any difference that it flows below it. It cannot; for the right arises from the occupation of the land and must equally apply to water running under the surface.

An analogy between water running on the surface and water under the surface is made here. If this were accepted then as riparians they would be entitled to have the water flow on to their wells.

Mr. Addison representing the defendant Blundell, replies:

The proposition on the part of the plaintiff is rather startling; for the direct consequence of it is this; that if any person, a mere cottager for instance, sinks a well in his ground, the mines of the surrounding neighbourhood, however extensive and valuable, can never afterwards be worked; if in doing so would have the effect of materially diminishing the water in the well; and it is to be observed in this case, that, if the plaintiff, who was proved to have deepened his well from time to time, were to sink it lower than the engine pit, he might still procure water. To derive any aid from the maxim, sic utere tuo ut alienum non laedas, (one must so use his own as not to injure another) the plaintiff must show that he has sustained injuriam, which is the whole question.

Tindal, C. J., delivered the judgement for the court:

The question argued before us has been in substance this; whether the right to the enjoyment of an underground spring, or of a well supplied by such underground spring, is governed by the same rule as that which applies to and regulates a watercourse flowing on the surface. (The principles of riparian rights are recognized.) And if the right to the enjoyment of underground springs, or to a well supplied thereby, is to be governed by the same law, then undoubtedly the defendants could not justify the sinking of the

coal pit.

...if the defendant is right, any tract of country, however extensive or populous, may be laid dry at the caprice of an individual and deprived of the greatest necessities of existence; and, on the other hand, taking the plaintiff's view, some mines may not be capable of being worked at all, or to such profits as they otherwise would, according to the mode of mining at present in use.

But we think, on considering the grounds and origin of the law which is held to govern running streams, on consequences which would result if the same law is made applicable to springs beneath the surface, and, lastly, the authorities to be found in the books, so far as any inference can be drawn from them bearing on the point now under discussion, that there is a marked and substantial difference between the two cases, and that they are not to be governed by the same rule of law.

The well may be sunk to supply a cottage, or a drinking place for cattle; whilst the owner of the adjoining land may be prevented from winning metals and minerals of inestimable value. ...the advantage on one side and the detriment to the other, may bear no proportion.

The amount and direction of surface water flow is known. This is not true of underground streams.

...if the defendant had proceeded and acted in the usual and proper manner in the land for the purpose of working and mining a coal mine therein, they may lawfully do so.

#### The application of the English doctrine in America.

This decision set the precedent later known by several names; cujus est solum, ejus est usque ad coelum et ad infernos, (the owner of the soil owns to the heavens and also to the lowest depth), or a shortened form, absolute ownership, damnum absque injuria, (damages without injuries). Upon its arrival in America, the doctrine was

referred to as the English or common law rule. This rule was destined to influence the decisions concerning ground water cases.

The text indicates the court was concerned over adopting a rule that might hinder economic development of the area. Various American courts expressed similar concern. In *Ellis v. Duncan* (1855) N.Y., the court stated if the rule were other than damnum absque injuria, one would always be under the threat of injuring his neighbor and therefore would fear to improve his land. (5, p. 1359)

Another case gave two reasons for upholding this ruling. (9, p. 1392) First, the secret, occult and concealed movement of underground water made it impossible to set rules governing it. Secondly, any rule would interfere with the development of the area. The general progress of improvements in agriculture and drainage, roads and railway construction would be restricted. *Frazier v. Brown* 12 Ohio St. 294 (1861)

Other reasons were given in defense of absolute ownership. When buying a tract of land, there is no way of estimating the value or the nature of the subterranean water that moves below. The original useful purpose of land may be greatly impaired if during its improvement, work is stopped because of damages caused to a lower proprietor. This would not be true if the owner had full right to develop the land as he had planned. (5, p. 1371)

In a western setting the above reasons can be logically defended. In many areas the problem is too much water rather than not enough. There are some cases where absolute ownership appears to have been applied at the expense of justice.

A person may do what he pleases upon his land, and so long as he violates no legal duty that he owes to his neighbor, he is not liable, although he may preform the act for the sole purpose of injuring his neighbor. *Paine v. Chandler* 134 N.Y. 385, 32 N.E. 18 (1892) (9, p. 1396)

In *Huber v. Merkel* 117 Wis. 355, 94 N.W. 354 (1903) common law or English law was rigidly applied. The owner was allowed to divert water away from his neighbor despite evidence which indicated his action was malicious. The intent of his action was to force his neighbor to pay in order to have the water supply restored. (4, 316)

#### American Doctrine

The merit of the penetrating analysis and also of the important precedent that the next case set justifies a detailed presentation. The logic in this case is admirable and deserves great recognition. However, this new line of reasoning received little attention until the later case of *Forbell v. New York* 164 N.Y. 522. The *Basset* case cited by the N.Y. judge indicates the influence of the earlier decision.

*Basset v. Salisbury Manufacturing Co.* 43 N.H. 569 (1862)



Bartlett, J. delivered the opinion of the court.

No landowner has an absolute and unqualified right to the unaltered natural drainage or percolation to or from his neighbor's land. In general it would be impossible for a landowner to avoid disturbing the natural percolation or drainage without a practical abandonment of all improvement or beneficial enjoyment of his land. Any doctrine that would in effect deprive him of his property; and so far from being an application of the maxim, cujus est solum, &c., would work a general denial of effect to it.

If A has the absolute and unqualified right to receive from and discharge into the adjoining land of B all the drainage and percolation as they naturally flow between that land and his own, this is substantially A's right to a use of B's land, practically depriving the latter of all beneficial enjoyment of his property, and in effect amounting to an appropriation of it; and as B and the other neighboring landowners must have similar rights, the improvement, or beneficial occupation of land becomes in fact impossible, and property in soil for nearly all useful purposes is annihilated.

But we do not think it follows from this as some recent cases have held, that a landowner has the full and unqualified ownership and the absolute and unqualified right of control of all water in or upon his land not gathered into natural watercourses for the non-existence of an absolute right does not conclusively disprove the existence of a qualified right.

Nor do we think that the maxim cited can be applied to establish an unqualified ownership of such waters in all cases, any more properly than it can be relied on to prove an absolute property in all the air within one's bounds. If the landowner has the absolute and unqualified ownership of all such water in or upon his land, his neighbor, by digging or otherwise, has no more right to take away his property water than his property sand.

If the water, not gathered into natural watercourses, belongs absolutely to the owner of the land, because it is part of the soil, and for that reason only, it must be subject to the same

law as the other components of the soil; the sand, loam and rock; which may not ordinarily be removed by an adjacent owner by the withdrawal of natural supports; for the maxim from which such ownership is deduced, when applied without qualification, as it must be to lead to this conclusion, allows no sound distinction.

To be sure, the language and the doctrine of some of the cases would seem to allow the landowner not only all the water in his land, but all he can draw thither; but such a rule, it seems to us, is in direct conflict with the principle upon which the theory is founded, and must lead in many cases to an interminable struggle for possession or removal of waters in the soil. Indeed, we do not know of any decision that perfectly carries out this doctrine of absolute ownership to its logical result; but the cases maintaining it go no further than the somewhat illogical view last suggested; probably because of the entire incompatibility of the former with any beneficial use of land. Nor do we think a sufficient foundation for this doctrine of absolute ownership can be found in the alleged difficulty of determining the direction and extent of percolation and drainage.

If this doctrine of absolute ownership is not well founded in legal principles, certainly there is nothing in its practical operation that so commends it to our approval as it leads to its adoption. It must, if held as in several cases, leave everywhere a conflict of right and enjoyment, irreconcilable in law or in fact; and however held, it will in a variety of cases, lead to incalculable mischiefs.

It seems to us inconsistent to hold that ordinarily you may not drain a watercourse by digging away the bank, which is your land, and yet sustain a doctrine which would allow you to dig so near it as to draw off all its water by percolation. Although the law does not generally allow one directly to deprive the landowner below of the natural advantages of a common watercourse, yet this doctrine, as held in some cases, would sometimes permit this mischief indirectly, by allowing all the sources of supply to be cut off from the stream.

The law regulating watercourses has its

origin and foundation in the benefits and injuries that may arise from the water; these benefits and injuries may often be quite similar in case of underground and surface drainage, and of drainage by watercourses. In such injuries the ultimate source of the water is never regarded; and the immediate source seems to us, equally immaterial, since it in no way changes the nature or effect of the water; and the regulations now settled by the law of watercourses were established, not because of any peculiarity in the origin of water in streams, but because the good or harm that may result from its management or use. Therefore, so far as a similarity in the rules of law is applied.

We think it does not follow, that because a landowner has not absolute and unrestricted right of drainage to or from his neighbor's land, he has no rights of drainage whatever, and that each landowner has the entire and unqualified ownership of all water found in his soil, not gathered into natural watercourses, in the common acceptance of that term.

We do not argue that some rights exist; that the owner of the land may make some use of the water in it; that he may do some acts that will affect to some extent the drainage; that a well may be dug, under some circumstances, although it will draw water by percolation from a watercourse, from adjoining land, or even from the well of a neighbor. If the views we have expressed are correct, they have already indicated the sole ground of qualification of the landowner's right in such cases, and that is as in certain cases of watercourses, the similar rights of others; and this will of course determine the extent of the qualification, which, as in analogous cases suggested and for the same reasons, is the rule of reasonable use--of reasonable exercise of one's own right. The rights of each landowner being similar, and his enjoyment dependent upon the action of the other landowners, these rights must be valueless unless exercised with reference to each other, and are correlative. The maxim, sic utere, etc., therefore applies, and, as in many other cases, restricts each to a reasonable exercise of his right, a reasonable use of his property in view of the similar rights of others.

What in any particular case, is reasonable

use or management, is ordinarily a mixed question of law and fact, to be submitted to the jury under the instructions of the court.

This decision by Justice Bartlett pointed a new direction for the settling of future cases. This ruling was the beginning of a new doctrine now called the American or reasonable use rule. During an intermediate period, reasonable use and correlative rights were used interchangeably, as in the Basset case. Reasonable use and correlative rights are now two separate doctrines. Correlative doctrine is also referred to as the California rule. This distinction, is inserted so that the following will not be confusing.

The Basset decision was the first known one to so rule, but this was not the first time the absolute ownership principle had caused concern. An English case, *Chasemore v. Richards* 157 Eng. Rep. 71 (1857), was taken to the house of Lords and a Lord Coleridge (9, p. 1399) expressed a dissenting opinion. He believed the rights of adjoining landowners in regard to percolating water in their land, should be governed by the maxim, "sic utere tuo ut alienum non laedas", (one must so use his own as not to injure another), and not by the rule of absolute ownership.

The American doctrine was not accepted immediately. In fact, even to this day the conflict between the two doctrines exists and some jurisdictions hold to absolute ownership. The extreme applications of absolute ownership,

Huber and Paine, previously cited, occurred thirty and forty years after Basset.

Other cases supported the reasonable use rule. The reasoning in a few of these cases during the formative period follows. In 1903 this decision was made: (9, p. 1398)

Certainly no good reason can be found for allowing the owner of land to draw subsurface water there from merely to waste, when this results in draining like water from his neighbor's land, to his detriment in its use and enjoyment. *Barclay v. Abraham* 121 Iowa 619, 96 N.W. 1080.

A Minnesota court in 1907 reasoned: (9, p. 1411)

The American courts are confronted with varying and in many cases utterly different geological conditions and problems of water supply. It is evident on its face that rules which might work well in an island like England might operate disastrously if indiscriminately applied to so diversified a continent as this.

Nothing is better settled than the fundamental principle of right and justice on which the common law is grounded, and which its administration is intended to promote, requires that a different rule should be adopted whenever it is found that, owing to the physical features and characteristics of the state, and the peculiarities of its climate, soil, products, and water supply, the application of common law rule tends constantly to cause injustice and wrong, rather than the administration of justice and right. *Erickson v. Crookston Water Works, P. & L. Co.* 100 Minn. 481.

Reasonable use was not the only qualifying term used.

A Minnesota farmer installed a ditch and trench on his land to collect percolating water. He made no apparent use of the water. The trench interfered with the municipality's supply and caused great damage. The court ruled against this action and issued the following dictum: (9, p. 1398)

Except for the benefit and improvement of his own premises, or for his own beneficial use, the owner of land has no right to drain, collect, or divert percolating waters thereon, when such an act will destroy or materially injure the spring of another person, the waters of which spring are used by the general public for domestic purposes. He must not drain, collect or divert such waters for the sole purpose of wasting them. *Stillwater Water Co. v. Farmer* 89 Minn. 58, 93 N.W. 907. (1903)

In other states reasonable use was accepted with reservations. All of the cases quoted thus far have been in humid areas. It is surprising to find the limited acceptance in New Mexico. The court expressed the opinion that the rule of reasonable use of correlative rights in percolating water applied only to water in artesian basins, or like place of supply, and not to the ordinary percolating water in soil. *Vanderwork v. Hewes* 15 N.M. 439, 110 Pac. 567. (1910) (9, p. 1403) Here a distinction was made between water in artesian basins and ordinary percolating water.

#### California Correlative Rights Doctrine

The next case to be considered is one of the most famous in the West. It is the one most often cited in disputes over ground water because conditions existing in many parts of the West were considered. The decision included some rules which the justice hoped would be a guide in settling future cases. From this discussion the California rule of correlative rights was derived. Two

decisions were given on the case. The first was by Justice Temple. An appeal was made and in the period between the two hearings Mr. Temple died. The second decision was given by Justice Shaw. The goal of common law and how it should be used is explained in the second decision by Justice Shaw. A great deal of interest was created by the first ruling. Those interested knew that if the ruling held, the future of water rulings would be changed. Several companies and individuals interested in water possessions submitted briefs to be considered by the second court. The application of justice to a situation that former common law did not fit is extremely commendable. A detailed review of these decisions will be presented so that the reader may gain full benefit from this important case. *Katz v. Walkinshaw* 141 Cal. 116, 70 pac. 663 (1902) The indented single-spaced sections are direct quotes from the opinions.

FACTS: The defendant was drawing off water from an artesian belt and was diverting the water a distance to be used on lands of others. The plaintiff complained that this was taking, "the water of which they have sunk wells, thereby causing the water to rise and flow upon the premises of plaintiffs, and which they ever had constantly so flowed for 20 years before the wrong complained of was committed by defendant." This water was necessary for the irrigation of the "growing of trees, vines, shrubbery, and other

plants, which are of great value to plaintiffs."

ISSUE: In the lower court the main dispute was as to whether the source of the water was from percolating water or from an underground stream. The plaintiff declared it was from an underground stream. If this was accepted then she (Katz) would be riparian and thus claim a right to the use. The defendant (Walkinshaw) maintained the water was supplied from percolating water and therefore she had absolute ownership of the water and could dispose of it as she saw fit, regardless of the consequence to the neighbor.

In the appeal the plaintiff accepted the judgement that the water was percolating, and so could not claim a riparian right of use. The plaintiffs felt however that they were, "entitled to the injunction (to stop selling to distant lands) prayed for."

HELD: "The court erred in granting the nonsuit, and the judgement is therefore reversed, and a new trial ordered."

REASONING: The defense was based solely on absolute ownership, "cujus est solum," that the percolating water contained in the ground belongs to the landowners as completely as do the rocks, minerals, etc. The plaintiffs claim cannot be established upon the theory of an underground watercourse which the plaintiffs are riparian.

It is obvious at once that the analogy between the right to remove sand and gravel from the land for sale, and to remove and sell percolating water, is not perfect.



If the water on his land is his property, then the water in the soil of his neighbors is their property. But, when he drains out and sells the water on his land, he draws to his land and also sells water which is the property of his neighbor. By pumping out the water from his lands, he can, perhaps, deprive his neighbors of water for domestic uses, and in fact render their land valueless. In short, the members of the community, in the case supposed, have a common interest in the water. It is necessary for, and it is an anomaly in the law if one person can for his individual profit destroy the community, and render the neighborhood uninhabitable.

Such law as has been made upon the subject (percolating water) comes from countries and climates where water is abundant, and its conservation and economical use of little consequence, as compared with a climate like southern California.

The value of water to the area was taken into consideration. Since the value of water is so great there was a possibility of speculation and exploration.

...and he (counsel for the plaintiff) asks whether these lands are to be converted into deserts because speculators may pump and carry away to some distant locality the subsurface waters which render the land fertile.

Some of the circumstances involved in the Acton v. Blundell case were discussed. The justice commented that the water problem seemed to be rather unimportant in England if the first case did not appear before 1843. The magistrate in Acton, discussed the difference between being able to see the stream and be conscious of behavior, while it was not so of percolating water. Temple, was of the opinion the universal principle of law--that the reasonable use of ones property, although it may injure

another could have been used in Acton.

But the maxim, "cujus est solum, etc.", (absolute ownership) furnishes a rule of easy application, and saves a world of judicial worry in many cases. And perhaps in England and in our Eastern states a more thorough and minute consideration of the equalities of the parties may not often be required. The case is very different, however, in an arid country like southern California, where the relative importance of percolating water and water flowing in definite water courses is greatly changed.

The merits and application of riparian rights to sub-surface water were analyzed, and while some revision would have to be made, it would not be any more extreme than a workable revision of the absolute ownership.

The objection to riparian rights applied to percolating water were considered and the learned justice showed that it could govern percolating waters.

A riparian owner may not divert the water, because he would thereby injure his neighbors who have equal rights in the stream. Still he may take a reasonable amount from the stream for domestic purposes, and that may equal the entire flow, although he thereby injures his neighbors. It is a question of reasonable use, and that applies both to the land of the person disturbing the percolation and to adjoining land.

The maxim, "sic utere," etc., plainly applies as between different riparian proprietors upon the same stream. The title to hold all land is subject to this maxim.

Proprietary rights are limited by the common interest of others, that is, to a reasonable use, --and such use one may make of his land, though it injures others.

This proposition is generally recognized, but for some reason has not always been recognized by the courts when considering the subject of percolating water, although all rights in respect to

water are peculiarly within its province. This rule of reasonable use answers most effectually the main argument against recognizing any modification of the, cujus est solum, doctrine as applied to percolating water.

It is even said that the opposite doctrine (applying to such water the rule as to riparian rights) would amount to total abrogation of the rights of property. It is said one could not clear or cultivate his land or build a house without interfering with percolating water, even if rights were admitted to exist, the difficulty of enforcing them would be insurmountable. I think I have shown that the admitted right to a reasonable use of the land and of the water answers all these objections.

Justice Temple cited other cases dealing with percolating waters, both English and Eastern. "But by far the most satisfactory case upon the subject is *Basset v. Salisbury Manufacturing Co.*" Temple's summation of the cases was:

I think it clear that the American cases do not require us to hold that the maxim, "sic utere tuo," does not limit the right of the landowner to the use of subsurface water, but, on the contrary, all the cases in which the question has been discussed held or admit that such maxim should limit such right where justice requires it. Such, I think, is the proper rule.

The second opinion, *Katz v. Walkinshaw* 141 Cal. 116, 74 Pac. 766, was delivered by Justice Shaw.

Several other companies presented briefs for both sides. The first complaint was that the opinion rendered went beyond the case that was before the court. Justice Shaw made the first reply to this complaint.

The role of common law.

*Katz v. Walkinshaw* 141 Cal., 116, 74 Pac. 766

"Cessante ratione, cessat ipsa lex." The reason of the law ceasing, the law itself ceases.

Many arguments, objections and criticisms are presented in opposition to the rules and reasoning of the former opinion. It is contended that the rule that each landowner owns absolutely the percolating waters in his land, with the right to extract, sell, and dispose of them as he chooses, regardless of the results to his neighbor, is part of the common law, and as such has been adopted in this state as the law of the land by the statute of April 13, 1850, (Stats. 1850, 219) and by section 4468 of the Political Code, and that consequently, it is beyond the power of this court to abrogate or change it; that the question comes clearly within the doctrine of stare decisis; that the rule above states has become a rule of property in this state upon the faith of which enormous investments have been made, and that it should not now be departed from, even if erroneous; that even if the question were an open one, the adoption of the doctrine of relative rights in percolation waters would hinder or prevent all further developments already made, thus largely restricting the productive capacity and growth of the state, and that, therefore, a sound public policy and regard for the general welfare demands the opposite rule; that the doctrine of reasonable use of percolating waters would require an equitable distribution thereof among the different landowners and claimants who might have rights therein, that this would throw upon the courts the duty and burden of regulating the use of such waters and the flow of the wells of tunnels, which would prove a duty impossible of performance; and, finally, that if this rule is the law as to percolating waters, it must for the same reason be the law with regard to the extraction of petroleum from the ground, and if so, it would entirely destroy the oil development and production of this state, and for that reason also that it is against public policy and injurious to the general welfare.

The idea that the doctrine contended for by the defendant is a part of the common law adopted by our statute, and beyond the power of the court to change or modify, is founded upon the misconception of the extent to which the common law is adopted by statutory provisions, and a failure to observe some of the rules and principles of the

common law itself. In *Crandall v. Woods*, 8 Cal. 143, the court approved the following rule, quoting from the dissenting opinion of Bronson, J., in *Starr v. Child*, 20 Wend 159: "I think no doctrine better settled that such portion of the law of England as are not adapted to our conditions form no part of the law of this state. This exception includes not only such laws as are inconsistent with the spirit of our institutions, but such as are framed with special reference to the physical conditions of a country differing widely from our own. It is contrary to the spirit of the common law itself to apply a rule founded on a particular reason to a case where that reason utterly fails."

The true doctrine is that the common law by its own principles adapts itself to varying conditions, and modifies its own rules so as to serve the ends of justice under the different circumstances--a principle adopted into our Code by section 3510, Civ. Code; "When the reason of a rule ceases, so should the rule itself." This is well stated in *Morgan v. King* 30 Barb. 16: "We are not bound to follow the letter of the common law, forgetful of its spirit; its rule, instead of its principle."

In *Beardsley v. Hartford*, 50 Conn. 542, 47 Am. Rep. 677, the court says; It is a well-settled rule that the law varies with the varying reasons on which it is founded. This is expressed by the maxim, "cessante ratione, cessat ipsa lex." This means that no law can survive the reasons on which it is founded. It needs no statute to change it; it abrogates itself. If the reasons on which a law rests are overborne by opposing reasons, which, in the progress of society, gain controlling force, the old law, though still good as an abstract principle, and good in its application to some circumstances, must cease to apply or to be a controlling principle to the new circumstances.

Whenever it is found that, owing to the physical features and character of this state, and the peculiarities of its climate, soil and productions, the application of a given common law rule by our courts tends constantly to cause injustice and wrong, rather than the fundamental principles of right and justice on which that law is founded, and which its administration is intended to promote, requires that a different rule should be adopted;

one which is calculated to secure persons in their property and possessions, and to preserve for them the fruits of their labors and expenditures. The question whether or not the rule contended for is a part of the common law applicable to this state depends on whether it is suitable to our conditions under the rule just stated.

Justification of correlative rights. The peculiarities and some of the effects of the southern California climate and the importance of irrigation in its development were reiterated by Shaw.

Many water companies, anticipating such an attack on their water supply, have felt compelled to purchase, and have purchased, at great expense, the lands immediately surrounding the stream or source of supply, in order to be able to protect and secure the percolations from which the source was fed. Owing to the uncertainty in the law, and the absence of legal protection, there has been no security in titles to water rights. So great is the scarcity of water under the present demands and conditions that one who is deprived of water which he has been using has usually no other source at hand from which he can obtain another supply.

It is clear, also, that the difficulties arising from the scarcity of water in this country are by no means ended, but on the contrary, are probably just beginning.

The field is open for exploitation to every man who covets the possessions of another, or the water which sustains and preserves them, and he is at liberty to take that water if he has the means to do so, and no law will prevent or interfere with him, or preserve his victim from the attack. The difficulties to be encountered must be insurmountable to justify the adoption or continuance of a rule which brings about such consequences.

Many underlying points which influenced and explained the decisions given in the cases cited were presented by

the justice. The conditions of the Eastern states were contrasted to those of the Western states.

There the rainfall is abundant and water, instead of being of almost priceless value, is a substance that in many instances is to be gotten rid of rather than preserved.

It is apparent that the parties who have asked for a reconsideration of this case, and other persons of the same class, if the rule for which they contend is the law, or no-law, of the land, will be constantly threatened with danger of utter destruction of the valuable enterprises and systems of water works which they control, and that all new enterprises of the same sort will be subject to the same peril. They will have absolutely no protection in law against others having stronger pumps, deeper wells, or a more favorable situation, who can thereby take from them unlimited quantities of the water, reaching to the entire supply, and without regard to the place of use. We cannot perceive how a doctrine offering so little protection to the investments in and product of such enterprises, and offering so much temptation to others to capture the water on which they depend, can tend to promote developments in the future or preserve those already made, and therefore we do not believe that public policy or a regard for the general welfare demands the doctrine.

The doctrine of reasonable use, on the other hand, affords some measure of protection to property now existing, and greater justification for the attempt to make new developments.

So far as the active interference of others is concerned, therefore, the danger to such undertakings is much less, and the incentive to development much greater, from the doctrine of reasonable use than from the contrary rule.

It may indeed, become necessary to make new applications of old principles to the new conditions.

In controversies between an appropriator for use on distant land and those who own land overlying the water-bearing strata, there may be two classes of such landowners--those who have used

the water on their land before the attempt to appropriate, and those who have not previously used it, but who claim the right afterwards to do so. Under the decision in this case the rights of the first class of landowners are paramount to that of one who takes the water to distant land, but the landowner's right extends only to the quantity of water that is necessary for use of his land, and appropriator may take the surplus. As to those landowners who begin the use after the appropriation, and who, in order to obtain the water, must restrict or restrain the diversion to distant lands of places, it is perhaps best not to state a positive rule.

Disputes between overlying landowners, concerning water for use on the land, to which they have equal right, in cases where the supply is insufficient for all, are to be settled by giving to each a fair and just proportion. And here again we leave for future settlement the question as to the priority of rights between such owners who begin the use of the waters at different times. The parties interested in the question are not before us.

The objection that this rule of correlative rights will throw upon the court a duty impossible of performance--that of apportioning an insufficient supply of water among a large number of users--is largely conjectural. No doubt cases can be imagined where the task would be extremely difficult, but, if the rule is the only just one--as we think has been shown--the difficulty in its application in extreme cases is not a sufficient reason for abandoning it and leaving property without any protection from the law.

With regard to the doctrine of reasonable use of percolating water, we adhere to the views expressed in the former opinion. The first opinion was thus reaffirmed and further defined by Justice Shaw.

California correlative rule refined. The correlative rights doctrine was further refined in California in *San Bernardino v. Riverside* 186 Cal. 7, 198 Pac. 787 (1921)

"...and it was said that the law of riparian rights, which required each owner to permit the



water to flow in its accustomed flow, was clearly applicable to subsurface water in such situation, and under that rule no one could drain his land, for he would thereby prevent the water from flowing in its accustomed flow to be percolating to his neighbor.

The court stated, however, that if the adjoining overlying owner did not use the water the appropriator could take all the regular supply and transport it to land outside the district until the adjoining owner was prepared and did begin to use the water, for it was not the policy of the law to permit any of the available waters of the country to remain unused, or to allow one having a natural advantage of the situation to prevent another from using the water, while he himself did not desire to do so. (6, p. 909)

Washington has a decision which recognized correlative rights. The court said that the modern doctrine of correlative rights in percolating water was the view most just and sound. (9, p. 1406)

The principle of natural justice and equity demand the recognition of correlative rights in percolating subterranean waters, so that each landowner may use such water only in a reasonable manner, to a reasonable extent upon his own land, and without undue interference with the rights of other landowners to a like use and enjoyment of waters percolating beneath their lands. *Patrich v. Smith* 75 Wash. 407, 134 Pac. 1076 (1913)

The California rule of correlative rights is based on the theory that the doctrine is analagous to, or an adoption of, the doctrine of riparian rights as applied to the surface streams. "Reasonable use may be said to be sharing of the common source of supply by the overlying land in proportion to the surface ownership." (46, p. 6)

The California correlative doctrine sets up rules governing different situations. First, in the case of use

by owners on the overlying land, all owners of all land that overlies a common supply of percolating water have coequal rights of reasonable beneficial use of the water on or in connection with their overlying lands. If the supply is not sufficient to satisfy the needs of the owner, each is entitled only to his proportionate share of the whole. This correlative-rights doctrine seems to deny that the ownership of the water is in the overlying owner; he has only the rights of user, as do riparians.

The second situation applies to owners who apply water to the overlying land and those owners who use it on non-overlying land, or transport it to distant lands. No one, not even the owner of overlying land, has the right to take the water off his land if in so doing he substantially diminishes the available supply of those applying the water to the overlying lands.

Third, if a surplus exists, after the reasonable requirements of the overlying users in the above situation have been satisfied, it may be appropriated for distant use or for public utility use within the area. The prior appropriation has paramount right. Appropriation right can be established by diversion and use and not under the procedure prescribed in the water code. (31, pp. 164, 165)

By now, the reader has probably ascertained that these principles were questioned and not readily accepted. The reason was used in other cases--in 1903 a court said,

(9, p. 1418) "A person intercepting water on his land which supplies the water of a stream has no more right to the water than those bordering the stream." *McClintock v. Hudson* 414 Cal. 276, 74 Pac. 849 (1903)

So, an owner of land overlying water-bearing strata, who has never used the water there under on the land, may invoke the aid of a court of equity, as against an appropriator of water from the common basin, to protect him in his right thereafter to use such water on his land, and thus prevent the appropriator from defeating such landowner's right, or acquiring a paramount right, by adverse use, or the lapse of time. *Burr v. Macley Rancho Water Co.* 154 Cal. 428, 98 Pac. 260 (1908) (9, p. 1443)

In 1936 (5, p. 1372) while driving a tunnel into a mountain, a large reservoir of underground water was tapped. It was acknowledged that there was no way in which the miners could have known the reservoir existed. The owner of a valuable spring on adjacent premises was awarded damages due to correlative rights. *O'Leary v. Herbert* 5 Cal. 2d 416, 55 Pac. 2d. 834 (1936)

The modern correlative doctrine contains several admirable provisions. It gives each landowner an equal chance at the common supply which appears both fair and just. Correlative rights would be very effective in dealing with the evils of speculators and opportunists who have intended to tie-up the water until the demand becomes greater. This situation was not mentioned directly although the justices in the Katz case did mention the possibility. With all its merits the doctrine must be examined

for weaknesses.

Mr. McHendrie (46, p. 7), a Colorado attorney, discussed some problems that have arisen. There seems to be a difference of opinion on what basis to proportion the water to the overlying owners. One thought is to use the total number of acres. Others contend the amount of land on which the water can be beneficially used should be the basis of the landowner's share. Another argument sometimes made is that the right should depend on the natural position of the owner's land. This doesn't consider the most beneficial use. The overlying owner at the lowest point in the basin could drain the supply of the owner over the highest point in the basin. It is contended that the rule leaves vested rights unprotected. It offers no reward for expenditure of effort and money, and may also defeat the aims of greatest beneficial use. This is also the heart of a blistering attack launched by Mr. Samuel C. Wiel (74, p. 278) on unqualified California correlative rights. Mr. Wiel has written one of the most respected and most quoted treatises on water law. These are his comments:

If every person owning land over a water bearing area shall be permitted to share with every other person whenever he shall see fit to drive his well, it is very probably, if not quite certain, that as the process of development goes on, many, if not all, will find themselves restricted in their use of the water they have brought to the surface to the extent of ruination.

It sees in correlative rights the error of the attractive-appearing "greatest good to the greatest number" formula, whose expansibility

of number unfortunately subdivides good entirely away. But this miscarriage the reports elsewhere control, as the reasonable-use rule requires, by reasonable classification of persons (and not "every" person) and at reasonable times (not "whenever he shall see fit") and all other conditions which the facts of a case suggest for promoting reasonable compromise and avoidance of extremes--which correlative rights and reasonable use signify.

A judge in Utah saw the same weakness: (46, p. 7)

To maintain that each owner of land over an artesian basin has an equal or correlative right to tap the basin at his pleasure and draw therefrom his proportion regardless of the priorities, use investments or reliance thereon, is to convert which is denominated a correlative or co-equal right into a weapon of depletion, to the ultimate destruction of all beneficial use, and though the right may continue to exist has become valueless. *Wrathall v. Johnson* 86 Utah 50, 40 Pac. 2d. 755, 768 (1935)

The three main cases which influenced underground water decisions Acton, Blundell, and Katz should provide substantial basis for better understanding Oregon case history.

#### Oregon Cases

Oregon has meager legal experience in underground water case law. The few cases that exist were disputes concerning springs and wells supplied from marshy land, the right granted by deed from others' land, or the right to appropriate spring water. Only cases which were taken to the Supreme Court are considered here.

#### Taylor v. Welch 6 Oregon 198 (1876)

The first case occurred in 1876, in Astoria, a city located at the mouth of the Columbia, which can hardly be

considered an arid region.

FACTS: The plaintiff, Taylor, had "from time immemorial received his supply of water for domestic, household and other purposes from a spring." The spring was fed by a "spring pond or swale", located on the land of the defendant, Welch. The defendant had dug a ditch and drained the swale for the purpose of reclaiming it. In doing so the supply of water to the plaintiff had been cut. This act injured the plaintiff.

ISSUE: The plaintiff prayed for a perpetual injunction against the defendant, which the lower court decreed.

HELD: "The decree of the court below must be reversed and that the complaint be dismissed."

REASONING: The court felt this was a question of fact. Was the spring supplied by a subterranean channel? "The court recognized the right of 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." The same right holds for subterranean channels. But it does not apply to water percolating through the soil or even flowing through an unknown or undefined channel. This along with the maxim, every person may use his own property as he pleases, provided such use is not an injury to another," were the only principles the court felt were necessary to decide the case. The evidence failed to prove to the satisfaction of the

court that a subterranean channel was the supply.

We do not think the right of plaintiff is sufficiently clear upon the evidence to warrant us in interfering with defendants' use and enjoyment of their property. Courts of equity will not interfere by injunction where the rights of plaintiff are doubtful.

This was the first case in Oregon to deal with underground water and therefore it set the precedent. Mr. Hutchins classifies the case as an example of landowner's exclusive property rights in percolating waters which occur in their land. He also feels the same rule was used in the next two cases, Boyce and Hayes, that will be reviewed. To challenge the interpretation of such a well-known and respected authority as Mr. Hutchins, seems very precarious. However, the maxim the court said would be used in the Taylor case was not one of pure unqualified absolute ownership. The phrase, "provided such use is not an injury to another," resembles the maxim of reasonable use more closely than of absolute ownership. It is true the courts generally accepted absolute ownership at the time of Taylor v. Welch. However, the Basset decision was in existence. It is a matter of conjecture as to what the judge actually was thinking.

Boyce v. Cupper 37 Ore. 256, 61 Pac. 642 (1900)

In this case the litigation was concerned with appropriation of surface water from a creek. Percolating water came into the discussion because it was the source of the

water for this creek during the irrigation season. The defendant argued that he had a right to the water since it was supplied from his land. This case arose in Grant county.

**FACTS:** The defendant's predecessor obtained an appropriation of water from a creek to be applied to 160 acres of land. The plaintiff's predecessor filed a later appropriation for water from the same creek for his land. The defendant later purchased another 160 acres of land (which will be referred to as the Anderson land) located between the defendant's and the plaintiff's land. The defendant, Cupper, irrigated the land on the Anderson property from the creek and had been doing so for several years. During a very dry year there was not enough water to supply the needs of the plaintiff.

**ISSUE:** The plaintiff asked for an injunction against the diversion of water by the defendant for use on Anderson land. The defendant argued that much of the water supplying the stream which the plaintiff used, originated from springs and marshes on his (the defendant's) land and percolated to the stream; therefore, he, the defendant, should be allowed to use these waters on his own property.

**HELD:** The defendant was enjoined from using water on the second tract of land until the plaintiff's wants were satisfied.

**REASONING:** The court acknowledges the fact that the



source of supply for the creek during the dry season, when irrigation was needed, came from the defendant's first-purchased land. After the water leaves the premises, the defendant loses all rights to its use. He cannot transport it downstream and recapture the water for use on the Anderson land. Query, did he have the right to it by adverse use? As long as there is a sufficient supply of water for all users there cannot be adverse use against one with a prior appropriation.

The defendant had the prior (first in time) appropriation for use of water on his original land. The plaintiff had the next appropriation and was entitled to the water if there were enough. The water used on the second tract was surplus.

In discussing the defendant's claim on the water originating on his land the court recognized the following rule.

The rule is general that water percolating under the soil beneath the surface, the course of which is unknown and unascertainable, belongs to the realty on which it is found. Gould, Waters par. 280; Taylor v. Welch, 6 Ore. 198

This rule more closely follows Gould than the maxim used in Taylor.

Gould (22, p. 539) in paragraph 280 states:

Water percolating through the ground beneath the surface, either without a definite channel, or in courses which are unknown and unascertainable, belongs to the realty in which it is found.

This leans toward absolute ownership. The Taylor decision was made before Gould published his treatise on water.

Hayes v. Adams 109 Ore. 51, 218 Pac. 933 (1923)

This case concerns the source of supply of a spring in Marion county.

FACTS: Hayes had purchased lot no. 17. Adams owned lots 15 and 16. Hayes purchased 3 acres of lot 16 and "the free and unrestricted use of a certain spring," located near the 3 acres but on Adams' land. Hayes build a curbing around the spring which was in a canyon. In a few days the water became muddy. This was agreed by both parties to be caused by Adams' hogs which had been rooting in the marshy area above the spring. The bed of the canyon above the spring contained many boggy, wet places. Vegetation grew along the banks indicating an underground stream. Adams consented to allow Hayes to lay tile along the bottom of the canyon. Hayes proceeded to install a hydraulic ram to supply running water to his buildings.

In 1922 Adams laid a tile along the tile Hayes had placed but at a lower level and thus drained away the water supplying the spring. Adams claimed he was collecting the water to install a hydraulic ram for his use. He could have achieved this by taking the unused water after it had passed through the Hayes ram.

ISSUE: The plaintiff (Hayes) asked for an enjoinder against the defendant (Adams) from diverting the water which supplied the plaintiff's spring.

HELD: The defendant was enjoined from diverting the

water of which the plaintiff had been granted the use.

REASONING: It was obvious the water was an underground stream. For this reason the rule of absolute ownership of percolating waters would not apply. Also, the ditch dug by the defendant would defeat the right conferred in the deed on the plaintiff.

The following dictum was included in the preceding decision:

...such (percolating) waters are a constituent part of the land and belong to the owners of the land, with the right in such owner to make any reasonable use thereof, including a use which, wither by reason of its character or 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.

Both of the previously reviewed cases were cited following this dictum, indicating the same rule was used in both cases.

#### Present Ground Water Law and Case Law

One other question should be considered--that of the constitutionality of the act 708 Oregon Law, 1955. It is likely the bill will be tested. The only basis on which to speculate on the outcome is the past experiences in other states. Rules have been handed down which appear contradictory.

The American Jurisprudence (1, p. 588) treats the subject, "The right of a landowner to gather and use percolating water as he will, cannot be taken from him by

legislature, unless by the exercise of the eminent domain or the police power."

In *Herber v. Merkle* 117 Wis. 355, 94 N.W. 354 (1903) (4, p. 316) the powers to prevent the waste of percolating waters was denied. It was held that the Wis. Law 1901, Chap. 354, par. 2, was unconstitutional. It reads:

Any person who shall needlessly allow or permit any artesian well owned or operated by him to discharge a greater amount of water than is reasonably necessary for the use of such person, so as to materially diminish the flow of the water in any other artesian well in the same vicinity, shall be liable for all damages which the owner of such well shall sustain.

The court said this law deprived the landowner of his right to intercept percolating waters. An authority could not be found which stated that percolating waters in the ground are common property of surface owners. The court did not believe an analogy existed between rules governing ground water and that governing gas and oil. They found that the owner had absolute right to divert ground water. "The specific holding in this case was that the statute deprived the owners of artesian wells of their property without due process of the law, and constituted the taking of property without compensation." (4, p. 316)

Hence in a number of states statutes have been enacted regulating the construction and use of artesian wells, and intended to prevent the waste and flow of water therefrom. Such statutes have generally been upheld as not violative either of the Federal or State Constitutions. *Lindsley v. Nat. Carbonic Gas Co.*, *Eccles v. Ditto*, *Hathorn v. Natural Carbonic Gas Co.* (1, Jur. p. 588)

In *Lindsley v. Natural Carbonic Gas Co.* 220 U.S. 61, 31 Sup. Ct. 337 (1911) the defendant questioned whether his right under the 14th amendment had been violated, (deprived of his property without due process of law). A New York statute forbids unnatural quantities of water to be pumped or withdrawn from a common supply. In this case mineral water and carbonic acid gas in a commingled state were being withdrawn from the ground. The value of the gas was greater than that of the mineral in the water. Because of this difference in value a large portion of the water was allowed to go to waste and an unreasonable and wasteful depletion of the common supply resulted. (4, p. 313)

In *Hathorn v. Natural Carbonic Gas Co.* (4, p. 313) the defendant was not utilizing the water for any purpose connected with the land. Instead he was marketing it throughout the country and was wasting water containing minerals.

The defendant contended the prohibition of the statute was unconstitutional on the grounds it deprived them of the use and enjoyment of their property. The law controlling these waters was applicable to only those who had wells driven into rock. This prevented equality of rights which should not prevail among citizens and property owners.

The court acknowledged the right of a citizen to the improvement and enjoyment of his property, even if it interfered with others. However, the court held this was an unreasonable attempt to separate use and enjoyment of the

owner's land. Other owner's flow was being destroyed and diminished by the marketing of carbonic gas. The court ruled this action should be restrained as unlawful. (4, p. 313)

"A statute directed against the wasting of water flowing from artesian wells has been upheld." (4, p. 315)

Ex parte Elam 6 Cal. App. 233 91 Pac. 811 (1907) Was the act which prevented the waste and flow of water from an artesian well in violation of the due process clause of the U.S. Constitution and also the State Constitution?

The court said the water which the act included is common to a large portion of the community and affects the general public right. The state under the police power has a right to regulate its conservation and use.

It was also contended that the statute was contrary to the State Constitution forbidding the granting of special privileges or immunities, in that no provision was made as the waters were pumped from subterranean sources. (4, p. 315)

The court answered that no surface owner has the right to use the subterranean water in excess of beneficial and reasonable use on the overlying land. If extracting an additional amount injures others, the extraction can be restrained.

Finally, it was contended that the provision forbidding the passing of local and special laws violated the State Constitution. The court answered that all persons in the same category were affected equally under the law.

The distinction between the two types of wells was a reasonable one. Therefore, the law did not violate the constitutional provisions. (4, p. 315)

In *Eccles v. Ditto* 23 N.M. 235, 167 Pac. 726 (1917) the New Mexico statute providing for the repairing or plugging of artesian wells to prevent waste was questioned. It was defended as a valid exercise of the police power. This statute did not take property without due process of the law, nor for public use without making just compensation. The court said: (4, pp. 315, 316)

There are two justifying reasons for the enactment of the statute under consideration by the legislature of this state. The first being the necessity of using water for irrigation and the limited quantity of water available. The artesian waters in a given district come from the same source, and are obtained by sinking wells to the common basin, thereby enabling the water to find its way to the surface. Necessarily, the waste of water derived from the common source of supply diminishes the amount of water available for legitimate uses, and hence works an injury and detriment to the general public desiring to make use of such waters. The second reason is that permitting the water to run to waste in large quantities results in "water-logging" the land, and destroys the productiveness. In the artesian belt of the Pecos Valley it has been found necessary to construct drains at enormous expense to carry away the waters which find their way to the lower lands. Hence, we find ample justification for legislative act regulating the construction and use of such wells, thereby preventing the unnecessary waste of water. (4, pp. 315, 316)

A Utah court (11, p. 842) upheld the constitutionality of water rights acts. The acts had been questioned on several different counts. *Elem Irrigation Company v.*

District Court 61 Utah 103, 211 Pac. 957 (1922)

It has been held that no one can acquire a vested right to waste water in any form, since he can acquire no absolute title to water; but that the state, in its governmental capacity, has the right to regulate, within reasonable bounds, the use of water, although the right case may have been adjudicated; and that no constitutional rights are invaded by such inconveniences as necessarily result in administering the law for the protection of all and for the public good.

In *City Mill Co. v. Honolulu Sewer and Water Commission* 30 Haw. 912 (1929) a Commission was given full power to survey the water supply, both surface and subterranean, within the district of Honolulu. It was given control over the drilling of new artesian or reopening old artesian wells that had been unused for 2 or more years. The goal of this authority was to conserve the water supply.

The section of the act questioned made it unlawful for any person to sink, bore, drill or drive for any artesian well or to reopen an old one without a permit. The court held this unconstitutional.

The Commission refused to grant a permit in a particular artesian basin because it believed that water was withdrawn faster than it could be recharged by natural processes. Further withdrawal would only deplete the basin more. In a few years salt water would render the entire basin useless to all. The court stated: (11, p. 842)

However broad and far-reaching the police powers might be, it could not be deemed to justify the prohibiting the individual owner of land from boring an artesian well thereon, while at the same



time permitting all the existing wells to continue to be operated without diminuation.

Thus in holding this section unconstitutional, the court adopted "the rule of correlative rights" to all owners whose land lies over an artesian basin. All owners may use the water as long as they do not injure the rights of others. In times of insufficient supply of water, all will be limited a reasonable share.

In concluding, the court stated that it would be abhorred to a sense of justice and violation of the owner's rights as a co-owner of the waters in the basin to prevent him from using any of the waters of that basin, while at the same time permitting an unrestrained use of the same water by others of its co-owners. (11, p. 842)

The last two cases are vivid examples of the variations in reasoning found in common law. The decision in either case could be reversed had the judge chosen to use the reasons of the other case.

## CHAPTER V

## SUMMARY

The purpose of this study was to use economic criteria to analyze the legal framework of ground water laws in Oregon. It is hoped that this analysis will aid in determining "why" and "how far" the legal framework will facilitate or impede future water allocation. "Security" and "flexibility" were the two broad concepts developed as criteria. A public water policy designed to point an effective direction in water use, would be a compromise between the two concepts. This compromise would contain enough flexibility to allow for changes over time in types of crops grown, demands for domestic use, and technology with sufficient security to induce investment and development.

A list of questions were formulated to localize specific aspects of the two broad concepts. Each of the questions will be considered.

Security implications:

- (1) Does the law provide for security of tenure?

Each of the past major bills concerning ground water in Oregon has recognized existing rights in ground water. The 1955 Ground Water Act (54) provided for an appropriation system for the entire state. This system guarantees a specified quantity of water if the supply is available.

The appropriation system has been used east of the Cascades for years. This system is also recognized by common law east of the Cascades. The Ground Water Act (54) brings all water in the state under appropriation. Prior to the act only the wells east of the Cascades were subject to appropriation and registration. When the registration of existing wells west of the Cascades has been completed, the quantity which would be taken from each well will have been recorded. This will specify the quantity which has been appropriated. The preceding discussion is based on the assumption that all provisions of the act are constitutional.

Either absolute ownership or reasonable use would be the rule, west of the Cascades and appropriation east of the Cascades, if the 1955 statute is ruled unconstitutional. Under the absolute ownership rule, there would be no assurance of a specified quantity. An owner may take all he can extract regardless of the amount of harm done to his neighbor under absolute ownership. Under the reasonable use rule a proprietor has considerable margin in the amount he may take, provided reasonable use is made of the water. The neighbor could incur heavy injury without recourse under this rule.

The property owner holds as secure a position in respect to condemnation of water rights as he does in any other property right.

Prescription, should offer little threat as all wells must be approved by the state engineer, and would hold a junior priority to existing wells. Prescription is establishing a right by notorious unchallenged use over a period of time.

(2) How difficult or expensive is it to obtain the security of tenure?

The action necessary to obtain a permit requires a minimum amount of effort. A small fee is paid to the state engineer's office for processing. Some expense may be involved if a surveyor is needed to locate the position of a well. The cost is nominal compared to the security this provides.

(3) Is expensive litigation needed to establish or hold these tenure rights?

The 1927 bill set the rules for appropriation of ground water. The applications for permits were all centrally handled by the state engineer. Priority can be easily determined by the dates recorded at his office.

If the 1955 statute (54) is rejected west of the Cascades, litigation is inevitable as the demand for water increases. The outcome would be unpredictable and could be very costly.

(4) What protection is there against the lowering of the water table to a point where use is no longer economical?

Subsection 7, section 2, states that reasonably

stable ground water levels shall be determined and maintained.

Section 25 contains the following description "...any well, by the nature of its construction, ...is unduly interfering with other wells..." Under this provision it seems the lowering of the water table could be stopped. The state engineer "may order discontinuance...of such a well to such extent as may be necessary to remedy the defect."

(5) What protective measures are there to insure the quality of the water?

Section 2 of Chapter 708 (54) mentions quality twice. First, in subsection 5, "Adequate and safe supplies of water for human consumption be assured..." Next, in subsection 8 which reads: "and impairment of natural quality of ground water by pollution." Pollution is defined as any impairment of the natural quality of ground water, however caused. The state engineer has the power to force controls within practicable limits to stop pollution under the police powers of the state.

(6) What provisions are there for compensation in case of condemnation? Is there a defined method for determining compensation?

There are no provisions in the new acts for condemnation procedure.

(7a) Are the vested rights protected? What are these vested rights?

"Vested rights" were not mentioned in the Ground Water Act. (54) The only reference to rights in this Act appears in subsection 2 of section 2 which states: "Rights to appropriate ground water, and priority thereof be acknowledged and protected..."

Chapter 708 (54) mentions vested and inchoate rights to the water of the state in section 36. (Cited in chapter II) This was an amendment to Oregon Revised Statute 537.170 which deals with deciding water use. This law states vested rights will be protected. It does not specify what constitutes a vested right.

(7b) Have there been cases where vested rights have been set aside for the good of society? What were the circumstances?

There are no ground water cases in which vested rights were set aside in favor of the good of society.

(8) To what extent will "first in time, first in use" be applied to ground water use?

The appropriation doctrine is built on, "first in time, first in use." Subsection 1 under section 2 of 708 (54) states: "Provision be made for the final determination of relative rights to appropriate ground water everywhere within this state and of other matters with regard thereto through a system of registration, permits and adjudication." However, in section 27 it states that in critical areas the state engineer may set aside the

priorities.

Flexibility implications:

(1a) Is there a system of priority uses?

Human consumption is given the highest priority. This is stated in the Ground Water Act 708 (54) in subsection 5, section 2. Chapter 707 (53) also states priority of human consumption in subsection 2a of section 36. In subsection 3L, section 10, water for livestock consumption was designated as second priority. After the two needs were satisfied, "other beneficial purposes in such order as may be in the public interest consistent with the principles of this act under existing circumstances" could be designated. It appears, therefore, that there are no other priorities listed in the law, after human and livestock consumption have been fulfilled.

(1b) Does the law allow for a higher use to take water from a lower use?

No specific provisions are made for this type of action. The State Water Resources Board is charged with broad powers to formulate water policy. Existing rights are to be protected and preserved. It does not appear likely the Board would attempt to change water allocation among existing users.

(1c) Can specific use be designated within a general class?

Such action could raise a constitutional question: does this constitute unequal treatment for citizens in the same

industry? It would not be possible for a layman to predict the courts ruling on this question.

(2) Is there flexibility in the priority system to allow for change in taste and technology?

A rigid priority system does not exist. Beneficial use under the existing conditions allows for maximum flexibility in allocation.

(3) Has there been an interpretation of the state's police powers in changing water uses?

There are no court opinions regarding the police power of the state in regulating water use. The Ground Water Act (54) indicates the state engineer has the authority, under the police power of the state, to interfere with existing rights under specified conditions. (subsection 9, section 2) These conditions include such factors as wasteful use, overdrawing supplies, and pollution.

(4) Can a water right be sold separately from the land or must the land be sold with it?

(5) Once an appropriation has been granted for a given use can it be changed to another use without losing priority?

Section 22 of the Ground Water Act (54) provides for both change in use and sale of water rights without loss of priority.

(6) Does the law include provisions allowing water use in



this state to meet the needs of the over-all economic sphere of which it is a part?

The Water Resources Board Act (53) grants power to the Board to enter into agreements with other states. (Sub-section 2 of section 17, and section 21)

(7) Are there "restrictive use" provisions?

(8) Is there a system of leases for given periods which may be renewed if the use is beneficial at the end of the lease?

There are no provisions for restrictive use or a system of leases in either of the 1955 Acts. (53, 54)

(9) Can water be taken for use in distant lands?

Use on distant lands, as such, is not mentioned in either Act. The provisions in Chapter 707 (53) in sub-section 2 of section 1 contain sufficient latitude to allow for such use. Common law has not allowed distant use unless a surplus exists.

(10) What powers are given administrators in changing water use?

If a critical ground area exists, the engineer can choose between several courses of action. He may (1) reduce the amount to one or more appropriators, (2) prorate the supply, (3) ration the water in accordance with the relative dates of priority of rights, (4) allocate water without reference to relative priority.

Other criteria that will allow for maximum use:

(1) Are there provisions for storage of water during an over supply period for later use?

The fees to be collected for registering various information includes those to cover storage. (Subsection 2b, section 22, Chapter 708) Beneficial use without waste is to be the basis on which the right to appropriate water rests. If stored, water satisfies these conditions, the state engineer has the power to grant a permit to use the available water. The amount depends on the quantity applied to beneficial use.

(2) Are there any provisions to measure social costs and values not determined in the market place? If so, what method or methods are to be used and who is charged with the responsibility?

There are no direct provisions that deal with social costs and values in either act. These may be implied, however, in the language used in section 1 of the Water Resources Board Act. (53) This section speaks of water playing an important role in the increased economic welfare of the people. The Board is to develop policy designed to encourage water use which will secure maximum beneficial use. Social costs and values are factors to be considered in determining maximum beneficial use.

(3) In many enterprises there is a minimum standard of size below which they cannot operate economically. During

periods of scarce water supply, will absolute ownership or pro-rationing of water on an equitable share basis, result in some of the units becoming uneconomical?

If all provisions of the acts are constitutional, the absolute ownership rule no longer applies west of the Cascades. Pro-rationing is only one of the alternatives provided the state engineer. Priority of right is more likely to be recognized. If this were the case, the junior appropriators would have no water and the senior proprietors all they were allotted. This might or might not result in the most economic use of water.

(4) Does the law recognize the inter-relationship between ground and surface water?

The State Water Resources Board was created so all the water resource uses would be coordinated under one state agency. This allows ground water and surface water to be considered as a single source.

Section 35 states the Ground Water Act (54) is a supplement to the surface water laws of the state.

(5) What factors have been taken into consideration by the courts in determining "reasonable use"?

Mr. Wiel, one of the most recognized authorities on water law wrote the following concerning reasonable use.

It is impossible to lay down an absolute rule and a mathematical equality; that is why the law has left it to the discretion of the courts,... Upon this point all the authorities are in accord, which is literally "all the world"; and it is even true in that literal sense

when we read the same in the English and American reports. "Reasonable is incapable of accurate definition," is the leading statement in England: while Americans say that "We anticipate the objection that this is not an absolute rule at all, but, as said by the judges in the opinions quoted from, the very nature of the common right is such that a precise rule as to what is reasonable use by any one proprietor for irrigation cannot be laid down."

The reason for a compromise doctrine is not that precision and certainty are undesired but that the indivisible subject matter eludes them, making discretion necessary; and the discretion is then limited not by only one thing alone but by requiring consideration of all the "surrounding circumstances" of parties, land uses, time, and all other observable facts of "scenery" so that action is conformable to the whole environment and not "in vacuo". Then the certainty upon which the doctrine rests. (74, pp. 280, 281)

Mr. Wiel's explanation of reasonable use would be applicable to "beneficial use", "adequate compensation", "waste" and "surplus". Each situation is unique and what is reasonable depends upon the circumstances.

The answers to the questions raised in Chapter 2 may indicate the direction future water allocation will take in Oregon. The answers were based on the assumption that the 1955 Acts (53, 54) were constitutional. In the future, not all cases will be covered by the existing statutes. In this situation, the decision will rely upon common law, and would likely follow the reasoning presented in Chapter 4. Theoretical situations can be constructed in which only common law could provide the probable outcome. It appears that for every situation two possible decisions can be

justified. It is questionable which doctrine the court would use in a dispute concerning the use of a well located west of the Cascades. They might hold to the absolute ownership doctrine. This gives the owner an unqualified right to as much water as he could pump from the well regardless of the effect on the neighbors' water supply. On the other hand, they could, and most likely would, rule this doctrine not applicable and apply the "reasonable use" rule recognized in other states.

If the 1955 Acts (53, 54) are ruled unconstitutional, prior appropriation doctrine will rule east of the Cascades and probably absolute ownership west of the Cascades. Both doctrines lack flexibility. Under prior appropriation, once a specific appropriation is made the proprietor possesses the right to that quantity so long as he continues to use the water. Absolute ownership contains the same evil and in addition there is no security that the supply will not be drawn away from a neighbor.

Common law depends heavily on such terms as, "reasonable use", and "beneficial use" which permit flexibility by the courts in their interpretation. However, courts are very reluctant to depart from past rulings. The past rulings have not been consistent. Therefore, it would be difficult to predict the outcome in a given case.

The 1955 Acts (53, 54) contain many flexible provisions and yet afford security to the investor. One

possible suggestion would be the provision for a lease system of water use. The lease period should be of sufficient length to allow the leasee to realize a return on his investment. The lease may be renewed if the use is considered beneficial when compared to other applications. This method of allocation would provide for the changes in tastes and needs over a period of time. This system has been used successfully in Ohio with the surface water of the conservancy districts. (15, p. 105) The Water Resources Board could formulate this type of water allocation policy.

Both of the 1955 Acts (53, 54) contain sufficient flexibility and security to allow effective water use with wise planning of the unallocated water. Few provisions have been made for changing the use of water which has been allocated. To change existing water use involves constitutional, social and economic implications.

## BIBLIOGRAPHY

1. American jurisprudence. Vol. 56. San Francisco, Bancroft-Whitney, 1947. 1098 p.
2. American law institute. Restatement of the law of torts. Vol. 4. St. Paul, 1939. 774 p.
3. American law reports annotated. Vol. 14. Rochester, N.Y., Lawyers Cooperative Publishing, 1921. 1508 p.
4. American law reports annotated. Vol. 24. Rochester, N.Y., Lawyers Cooperative Publishing, 1923. 1566 p.
5. American law reports annotated. 2d series. Vol. 29. Rochester, N.Y., Lawyers Cooperative Publishing, 1953. 1458 p.
6. American law reports annotated. Vol. 31. Rochester, N.Y., Lawyers Cooperative Publishing, 1924. 1534 p.
7. American law reports annotated. Vol. 35. Rochester, N.Y., Lawyers Cooperative Publishing, 1925. 1539 p.
8. American law reports annotated. Vol. 54. Rochester, N.Y., Lawyers Cooperative Publishing, 1928. 1539 p.
9. American law reports annotated. Vol. 55. Rochester, N.Y., Lawyers Cooperative Publishing, 1928. 1566 p.
10. American law reports annotated. Vol. 109. Rochester, N.Y., Lawyers Cooperative Publishing, 1937. 1531 p.
11. American law reports annotated. Vol. 78. Rochester, N.Y., Lawyers Cooperative Publishing, 1932. 1547 p.
12. Angell, Joseph K. A treatise on the law of water-courses. 7th ed. Boston, Little, Brown, 1877. 735 p.
13. Bingham, Joseph Walter. Cases on the law of water rights. Indianapolis, Bobbs-Merrill, 1916. 750 p.
14. Broadbent, Lorin J. Protection of ground water diversion. Utah Law Review 5:181-195. 1956.
15. Burke, William J. The origin, growth and function of water use. Wyoming Law Journal 10:95-111. 1956.

16. Castle, Emery N. The applicability of marginal analysis to problems of water allocation. In: Western agricultural economics research council. Water resources and economic development of the West. Report no. 5. Berkeley, 1956. \_\_\_ p. (Conference proceedings, Berkeley, California, Dec. 18-20, 1956) In press.
17. Ciriacy-Wantrup, S. V. Concepts used as economic criteria for a system of water rights. *Land Economics* 32:295-312. 1956.
18. Ciriacy-Wantrup, S. V. Some economic issues in water rights. *Journal of Farm Economics* 37:875-885. 1955.
19. Cone, Charles E. Ancient water codes. *Reclamation Era* 33:189. 1947.
20. Davidson, T. E. Demands for and uses of water in industry. In: John F. Timmons. *et al*'s. Iowa's water resources. Ames, Iowa State College Press, 1956, p. 71-78.
21. Farnham, Henry Philip. The law of waters and water rights. Vol. 1. Rochester, N.Y., Lawyers Cooperative Publishing, 1904. 896 p.
22. Gould, John Melville. A treatise on the law of waters. 2d ed. Chicago, Callaghan, 1891. 882 p.
23. Greenshields, Elco L. The expansion of irrigation in the West. In: U.S. Dept. of Agriculture Yearbook, 1955. p. 247-251.
24. Harding, S. T. Statutory control of ground water. *American Society of Civil Engineers Transactions* 120:490-498. 1955.
25. Heady, Earl O. and John F. Timmons. Economic framework for planning efficient use of water resources. In: John F. Timmons. *et al*'s. Iowa's water resources. Ames, Iowa State College Press, 1956. p. 47-61.
26. Huffman, Roy E. Irrigation development and public water policy. New York, Ronald Press, 1953. 308 p.
27. Hutchins, Wells A. The development and present status of water rights and water policies in the United States. *Journal of Farm Economics* 37:866-874. 1955.
28. \_\_\_\_\_ The Nevada law of water rights. Carson City, State Printing Office, 1955. 62 p.





39. Kinney, Clesson S. A treatise on the law of irrigation and water rights and the arid region doctrine of appropriation of waters. 2d ed. Vol. 2. San Francisco, Bender-Moss, 1912. p. 1098-2194.
40. Kirkwood, Marion Rice. Appropriation of percolating water. Stanford Law Review 1:1-22. 1948.
41. Landerholm, Irvin C. Real property-water law in Oregon-percolating waters. Oregon Law Review 30:257-264. 1951.
42. Legislative Research Commission. Water rights in Kentucky. Frankfort, 1956. 75 p.
43. Lord's Oregon Laws. Vol. 3. Salem, State Printer, 1910. p. 1998-2708.
44. Martz, Clyde O. Rights incident to possession of land. Boston, Little, Brown, 1954. 258 p.
45. McGuinness, C. I. The water situation in the United States with special reference to ground water. Washington, U.S. Government Printing Office, 1951. 134 p. (U.S. Geological Survey Circular no. 114)
46. McHendrie, A. W. The law of underground water. Rocky Mountain Law Review 13:1-19. 1940.
47. McHendrie, A. W. Underground water legislation. Rocky Mountain Law Review 23:434-439. 1951.
48. Oregon. Attorney general. Biennial report and opinions of the Attorney-General of the state of Oregon. Salem, State Printing Department, 1932. 815 p.
49. Oregon. Attorney general. Biennial report and opinions of the Attorney-General of the state of Oregon. Salem, State Printing Department, 1942. 667 p.
50. Oregon code. Vol. 3. Indianapolis, Bobbs-Merrill, 1930. p. 3731-5513.
51. Oregon code. Vol. 5. (Supplement) Indianapolis, Bobbs-Merrill, 1935. 2044 p.
52. Oregon Compiled Laws Annotated. Vol. 8. San Francisco, Bancroft-Whitney, 1940. 1478 p.
53. Oregon Laws (1955) Chapter 707 (House bill 25)
54. Oregon Laws (1955) Chapter 708 (House bill 26)

55. Palmer, William R. Utah's water courts. Reclamation Era 33:233. 1947.
56. Parker, Garald G. Ground-water situation of the United States. Soil Conservation 15:53-58. 1949.
57. Parker, Garald G. Pure water for farms and cities. In: U.S. Dept. of Agriculture Yearbook, 1955. p. 615-635.
58. Permanent American Law Reports Digest. Vol. 11. Rochester, N.Y., Lawyers Cooperative Publishing, 1951. 1232 p.
59. Pomeroy, John Norton. A treatise on the law of water rights. St. Paul, West Publishing, 1893. 553 p.
60. Powell, Richard R. The law of real property. Vol. 5. New York, Matthew Bender, 1956. 880 p.
61. Powell, Sheppard T. and Hilary E. Bacon. Magnitude of industrial demand for process water. American Water Works Association Journal 42:777-785. 1950.
62. President's Water Resources Policy Commission. A water policy for the American people. Vol. 1. Washington, U.S. Government Printing Office, 1950. 418 p.
63. President's Water Resources Policy Commission. Water resources law. Vol. 3. Washington, U.S. Government Printing Office, 1950. 777 p.
64. Smith, Stephan C. Problems in the use of the public district for ground-water management. Land Economics 32:259-269. 1956.
65. Text of president Eisenhower's annual message to Congress on the state of the Union. New York Times p. 11, col. 1. Jan. 11, 1957.
66. Thomas, Harold E. The conservation of ground water. New York, McGraw-Hill, 1951. 290 p.
67. Thompson, David G. and Albert G. Fiedler. Some problems relating to legal control of use of ground waters. American Water Works Association Journal 30:1049-1091. 1938.
68. Thompson, George W. Commentaries on the modern law of real property. Vol. 2. Indianapolis, Bobbs-Merrill, 1939. 77 p.

