Montana water rights administration  
by Tom Moffet Gilkerson

A THESIS Submitted to the Graduate Committee in partial fulfillment of the requirements for the degree of Master of Science in Agricultural Economics 
Montana State University  
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Abstract:  
The purpose of this thesis is to analyse and evaluate the relative advantages of Montana’s present system of mater right administration as compared with the system of a centralized office as adopted in most other Western States. This thesis is a presentation of information on the establishment and the security of mater rights and on the completeness of and the convenience of access to mater right records under the two systems.

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Water rights can be acquired, in Montana, by appropriation and use and the notice of appropriation may be recorded. Extra expense is incurred in adjudication proceedings. This procedure, however, furnishes no guarantee as to the worth of rights. Information concerning rights is recorded only in County offices. These rights may allow the greatest return possible to the individual now using water under them. However, the present method of administering water rights does not furnish the information needed about mater resources and their use, and does not give security to the individuals having such rights. Studies by various agencies, both State and Federal, have been made and are now in progress to collect and record information. The records gathered by these agencies are incomplete and relatively inaccessible to others who are seeking information. This results in inconvenience, sometimes in duplication of work, and in added expense.

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Through the changes which have been made in Montana law precedent has been established to allow for the further changes necessary for the organisation of a central agency to administer water rights. Under such an agency, water right administration would be carried an in a more scientific manner.
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by

T. MOFFET GILKERSON

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In Charge of Major Work

Chairman, Examining Committee

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The author wishes to acknowledge the receipt of numerous letters from heads of central agencies in other states, from heads of agencies interested in Montana's water resources and their use, and from Montana lawyers, and to express appreciation for their generous expenditure of time in giving the opinions contained therein. The author also wishes to express appreciation for the advice and criticism of O. W. Monson, of the Department of Irrigation and Drainage, and of O. A. Parsons and G. H. Craig, of the Department of Agricultural Economics, Montana Agricultural Experiment Station.
ABSTRACT

The purpose of this thesis is to analyze and evaluate the relative advantages of Montana's present system of water right administration as compared with the system of a centralized office as adopted in most other Western States. This thesis is a presentation of information on the establishment and the security of water rights and on the completeness of and the convenience of access to water right records under the two systems.

In the past, the purpose of administration of water rights has been to protect existing rights in their use of the amount of water to which they were entitled, to guide settlers on lands so that they might know whether or not the land was susceptible of irrigation, and to guide purchasers of lands in irrigated areas so they might know of the existence of a water right and its worth and to furnish information to persons wishing to invest in irrigation enterprises. Present information about water rights must be furnished to commissions acting in inter-state compacts so that they may reach basic agreements as to how mutual water supplies shall be divided. Such agreements are subsequently enforced by each state within its boundaries. In the future, there may be nation-wide practice of conservation for continued use. This may affect the way in which all natural resources are used and administration of water rights may demand more responsibility by the State.

Water rights can be acquired, in Montana, by appropriation and use and the notice of appropriation may be recorded. Extra expense is incurred in adjudication proceedings. This procedure, however, furnishes no guarantee as to the worth of rights. Information concerning rights is recorded only in County offices. These rights may allow the greatest return possible to the individual now using water under them. However, the present method of administering water rights does not furnish the information needed about water resources and their use, and does not give security to the individuals having such rights. Studies by various agencies, both State and Federal, have been made and are now in progress to collect and record information. The records gathered by these agencies are incomplete and relatively inaccessible to others who are seeking information. This results in inconvenience, sometimes in duplication of work, and in added expense.

The cost of a central agency for the administration of water rights in Montana would not be greatly different from that of the present system. Advantages would accrue from the operation of a central office, according to opinions of those in charge of similar offices in other states, heads of agencies interested in getting the information forthcoming from such an office and from individuals interested in water rights.

Through the changes which have been made in Montana law precedent has been established to allow for the further changes necessary for the organization of a central agency to administer water rights. Under such an agency, water right administration would be carried on in a more scientific manner.
The Problem: This study is concerned with determining how the administration of water rights in Montana can best be carried out, whether by the present system or by a system of central office control.

Water Rights Administration in General

Water rights are the means of determining to whom the use of water shall go. Water is a valuable natural resource. Additional returns are possible to those controlling the supply of water for use. Uses of water include irrigation, power, navigation, and recreation. The determination of how water shall be divided between these uses under water rights and the collection and dispersal of information about these uses and the water supply is the purpose of administration. Administration of water rights is the business of the State and to it is left the responsibility of choosing the system of administration.

The System of Water Rights Administration in Montana

Montana makes provision in its laws for the acquirement of water rights. A definite method has been set up, but water rights may also be acquired without conforming to some of the detailed provisions of the law. However, when two rights have been established at the same time, one in accordance with precepts of law and one without the law, the one complying with law takes precedence. The means of determining the value of rights in comparison with one another is by adjudication. This is a process of subjecting rights to court scrutiny and results in a decision as to the right to water of the various parties to the court action, which
is based on the evidence presented to the court. Provision is made for both appropriations and adjudications to be recorded in the county offices. There are, however, many appropriations of which no record is made. Records of both adjudications and appropriations remain in the files of the county and no further official action is taken by the state.

A Proposed System for Montana

It has been proposed from time to time by various groups that Montana adopt a "water right code." This would set up a central agency in the state for the administration of water rights. Proposed "codes" closely follow those in effect in other Western states. A "water right code" is a codification of the laws of the state which contains all laws pertaining to water and only those laws.

The Purpose: It is the purpose of this study to compare and analyze the two systems of administration in their application to Montana conditions.

The Method: Information has been gathered concerning the present system of administering water rights in Montana and concerning the system of a central agency as it is being carried on in other states in regard to establishing water rights, accumulating and keeping water right records and administering water rights. The information is set forth in this thesis by giving first the historical development of water rights in Montana, then the present system of administration in Montana, and finally the system of a central agency as it could be applied to Montana.

Source of Data for and Limitations: Factual data on Montana water rights were gathered from the Office of the State Engineer, the State Water Con-
ervation Board, the State Planning Board, the Bureau of Reclamation, and the Army Corps of Engineers. Opinions regarding water rights in Montana and in other states were ascertained from lawyers, heads of federal agencies (Farm Credit Administration, Forest Service, Farm Security Administration, Agricultural Adjustment Administration, Reclamation Bureau, Geological Survey), and from State Engineers of other semi-arid states. Cost data pertaining to central agencies in other states were acquired by correspondence and from the publications of those agencies.

The factual data were gathered for the most part under Work Projects Administration study 0. P. 65-1-91-125 (W. R. 3116), "Water Resources of Montana and Their Use."

This study is limited in scope because of lack of time or funds to carry on an exhaustive study of either Montana's present system or the system of a central agency as carried out in other states. Many materials which would have been useful in this study are no longer available. Staffs of Central Offices in other states are too busy to compile a complete record of costs as concerned with their system.
Control of water rights has developed during different stages of the State's history, but in a haphazard manner.

Pre-Territorial Water Rights Administration

Water rights concerning storage and flowing water were in existence before Montana became a territory. When the territory was organized "there had been a storage dam and ten miles of ditches dug." Rights to the use of flowing water had, no doubt, been exercised in both mining and irrigation. Water was essential in mining and sometimes had to be conveyed considerable distances. The location, distribution, and control of water were the principal problems connected with placer mining, and "irrigation farming in the mountainous west probably began before Montana Territory was born." 

Mining Camp Rules

Each mining camp formulated rules of its own as to what constituted a claim; each claim was publicized by posting a notice. A claim gave either a right from the middle of the stream across the valley or one for a strip 100 feet long. If claim of a measured strip did not give access to water, the "right from the middle of the stream" would. A claim left

not worked for a period of three days could be "jumped" and its right to water taken. This rule could be set aside only in the case of illness. Each miner could use water or divert it during its passage across his claim but he must have returned it to its natural course before it left his boundaries. As placer mining gave way to the type of mining which made use of quartz mills, the pioneers turned from mining to agriculture. The early American pioneers were farmers by nature and environment and to return to this work was natural.\[5/\] Irrigation of cropland following closely on the heels of mining became a competing enterprise and fell heir to problems discovered in use of water for mining. These ideas are well expressed in the following quotation: "Everyone who has had the least experience will at once admit the absolute necessity of timber and water in successful mining. We have rich placers never worked, because no water could reach them without enormous expense. Hundreds of mines made good yields last year, for the large supply of water. Give water enough to run giants in our placers, and millions in fine gold would be added to the annual yield of our mines. Give more water and the mines will give more gold. Nearly all our mines have water enough, and some more than enough, in the early part of the season when the snows are melting and the spring rains fill the streams. Could the surplus be saved until the dry season came, the efficient working time might be so prolonged as to double the yield of gold.

"Reservoirs and irrigating canals have long been used for mining.  

These modes of increasing and prolonging the supply of water were resorted to by our enterprising miners at an early day in the history of Montana mining, as shown by the old reservoirs in nearly every gulch, and by the numerous ditches which once conducted the waters along the hillsides of every valley. But the mines are so numerous, and the amount of water for each is so limited, that this system of supply can avail to a limited extent only for increasing the water and for prolonging the mining season, save by an outlay of money beyond the means of private individuals. It is different with irrigation, for large streams can be utilized, and the same canal can supply hundreds and even thousands of farms.4/ Scarcity of water, means of diverting large streams of water for the use of numerous individuals, the storage of water for use at other times of the year than that for which it was naturally available, and the division of the supply among many claimants were the problems encountered in irrigation.

Miners' Courts

Rights were determined by miners' courts before the advent of statute law. The customs followed by miners came from California and were based on those followed by the Spaniards in Mexico. Major Jesse B. Roote says, "Wherever there was mining ground, they organized a mining district, and adopted rules and regulations for the government and control of all matters concerning mining, the use of water for that purpose, and the acquisition and disposal of mining claims, after defining what a

A passage quoted by Major Roote from Decious S. Wade, later (March 17, 1871) made Chief Justice of the State Supreme Court, states, "They organized Miner's Courts, preserved order, protected life and property, and adjudicated rights." Miners elected a president, judge, recorder, sheriff, and prosecuting attorney for their camp or district at these public meetings. After all the evidence was before this group, a decision was made by a vote of all the miners present. It was the sheriff's duty to see that the decision was carried out. The recorder kept all transfers of property, wills, deeds, mortgages, and marriage licenses, but his duties related chiefly to recording the ownership of mining claims. Following the example of the Washington and Idaho territories, customs developed in the use of water for mining were written into the first of the Montana Territorial Statutes, those of 1866 and 1872, and applied mainly to irrigation from that time on. Since the use of water was first developed for mining purposes, customs followed in the regulation of water for this use were not entirely applicable to the use for irrigation. However, this was not at first taken into consideration.

Territorial Laws Concerning Water Rights Administration

Rights to the use of water, after the passage of the earliest territorial laws, were acquired both within and outside the tenets of law. In either case, however, they have been and now are susceptible of control under the laws of the State. The first laws of the Territory of Montana under the Organic Act were passed at the Legislative Assembly which convened on December 12, 1864, in Bannock. The first act to protect
and regulate the use of irrigation water on land in the Montana territory, a part of what is known as the Bannock Codes, was passed on January 12, 1866. There were twelve sections of this first irrigation law. They provided that: (1) any person on the bank of the stream shall be entitled to water, (2) any person away from the bank shall be entitled to a right of way for a ditch, (3) the right of way shall be only for a ditch or a dike, (4) three commissioners shall be appointed by the nearest Justice of Peace to equitably apportion water upon alternate days to different localities, (5) eminent domain proceedings can be initiated by these commissioners, (6) the amount of damage done by the ditch may be assessed to its owners, (7) the money shall be collected in an action of debt, (8) a wheel or machine may be placed on the bank to raise the water, (9) the commissioners shall receive two dollars per day, (10) rights may not conflict with those existing, (11) damages caused by waste waters can be assessed against the person permitting such waste to take place, and (12) this act shall be in full force after passage.

The Territory of Montana, by these laws, took over from the miners' courts the duty of setting up the rules that would guide and regulate human action as concerned in the use of water. These and subsequent laws were repealed by the Sixth Session of the Territorial Legislature. The laws concerning water use, passed by this session, were almost identical with those already given except that section five provided that, "all

controversies shall be determined by date of appropriation."6/ The fact that date should be the determining factor by which controversies were to be settled had been implied in section 10 of the laws passed by the first session and further clarified in a case brought before the first session of the Supreme Court of the Montana Territory.7/ This was the first recorded statement of the doctrine of priority.8/ This doctrine, under which the appropriation first in time becomes automatically first in right, is, along with that of beneficial use, of basic importance in determining present-day water rights. According to Major Jesse B. Roots, there had been recognition of the principle of priority much earlier. Of the first legally organized court ever held in the territory of Montana which convened on the first Monday of December in 1864, Roots quotes Wade as saying: "It is unfortunate that these Justices, during their period of office, delivered no opinion in writing, for thereby their valuable services to the territory and to the profession have, to a great extent, been lost.... We know from the records of the district courts and of the Supreme Court that the litigation of that period was extensive and important, and that it related chiefly to placer claims, to water for mining and irrigating purposes, and to possessory rights in the public

lands. The doctrine of prior appropriation of water for the purpose of placer mining: that the first appropriator thereof for such use became entitled thereto as against subsequent appropriators, first in time, first in right, had taken root in pre-territorial days under the rules and regulations of the miners; and under the provisions of the Bannock statutes of 1865 and the Act of Congress of July 26, 1866, the doctrine was extended and made to apply to water for agricultural or any useful purpose. The application of this doctrine, which had arisen in California, and was born of the necessities of placer mining and the arid condition of the country, which overturned that of riparian rights as known to the common law, and the adjustment of controversies and rights consequent thereon, and questions growing out of the possessory rights in the public lands, and of their practice, occupied largely the attention of the first period. 2/

State Law for Water Right Establishment and Administration

Upon adoption of its Constitution, the State of Montana took over the responsibility of the waters within the state. That Document says, "The use of all water now appropriated for sale, rental, distribution, or other beneficial use, and the right of way over the lands of others for all ditches, drains, flumes, canals and aqueducts, necessarily used in connection therewith, as well as the sites for reservoirs necessary for collection and storing the same, shall be held to be a public use." 10/

2/ Sanders, op. cit., p. 553.
The first attempt to write anything approximating a complete irrigation law for Montana was undertaken by the Legislative Assembly of 1885. At this time the California Code, so modified and changed as to fit Montana conditions, was adopted. Many changes have since been made in the various sections of Montana Water Right Laws.11/

Since the Territory of Montana was organised, changes have been made in laws affecting the use of water by almost every Legislative Session. Changes were made during the Second Regular Session pertaining to the right of way for ditches. In the Sixth Regular Session a standard measurement for water was adopted and provisions were made for the appointment of commissioners. In the Seventh Regular Session amendments were made allowing the appropriation of water rights for navigation. Changes were made in the laws during every Regular Session of the Legislature from the Ninth through the Twenty-Sixth. Much of the action concerned Water User's Associations, Irrigation Districts, and the Water Conservation Board.12/

Unwritten Water Right Law

Cases in Montana Courts concerning water rights have been numerous. With few exceptions each Montana Report contains an account of at least one case having to do with the use of water. These cases have been decided both on the basis of statute law and common law. Common law perpetuated in this way has been built up until it makes a system of

12/ See "Laws of Montana" of the respective sessions of the Legislative Assembly mentioned above.
"unwritten law" which parallels and is of great importance in the decisions related to the application of statute law.

It has been declared in a case argued before the Montana Supreme Court that "there is no distinction between the California Water Code and our own."13/ This has had the effect of tying the decisions which have been made in Montana Courts with those made in California Courts so that the "unwritten law" in Montana covers the span of existence beginning with the customs practiced in California Territory up to and through the present time.14/

Restrictions of the right to appropriate unlimited amounts of water in Montana were brought about through a Supreme Court decision.15/ It is possible to make a valid appropriation of water in Montana without complying with the statute. This is a result of a decision of the Montana Supreme Court.16/ The Court has held that in order to appropriate water a person need not be the owner nor does he have to be in possession of land.17/

The history concerned with deciding the amount of water necessary for irrigation of land is the subject of lengthy discussion in one of the late Supreme Court cases.18/ The last Montana Report contains a lengthy discussion of water rights on public lands.19/

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13/ See Bailey et al., Tintinger et al. 45 M. 159.
14/ See Woolman v. Garringer, 1 M. 535 and King v. Edwards, 1 M. 235.
16/ See Murray v. Tingley, 20 M. 260.
Irrigation Organizations and Water Rights Administration

The experiences undergone by Montana have been somewhat similar to those of other states in attempting to get a code adopted, but most irrigation states now have some kind of a water code. Irrigation organizations have played a prominent part in the development of water rights and their administration in Montana. From the time of their inception they have influenced the water right laws which have been passed in this state.

Purposes and Objectives of Irrigation Organizations

The first farmer organization in Montana which presumed to discuss irrigation, from the standpoint of the type of laws that should be passed concerning it, was the Montana Farmer's Institute. The first meetings of that organization were held in 1902 but it was not until 1905 that it became the recipient of funds granted by the State Legislature.20/ During the first year of existence of the Farmer's Institute the Ray bill was presented to the Seventh Legislative Assembly of the State of Montana. This bill, for the passage of machinery by which water rights of the State would be controlled by a State Engineer, met with defeat. However, passage of this bill was again advocated by the Montana Farmer's Institute in its second annual report.21/

The Montana Railroad Commission was designated (in 1919) to act as the Montana Irrigation Commission for the express purpose to "do all things necessary for the full development of the irrigable lands."22/

20/ See Second Annual Report of the Montana Farmer's Institute for the year ending Nov. 30, 1905, pgs. VI and VII.

21/ Ibid., pp. 159-161.

22/ The Board of Railroad Commissioners, "Irrigation in Montana," Dec., 1920, p. 5.
So many inquiries about water supplies, reservoir sites, irrigable areas, and requests for information were received that the members soon recognized the need for gathering such data and attempted to fulfill that need.23/

Subsequent to the two organizations mentioned above, the work of introducing irrigation in Montana was carried on by the Montana Irrigation and Drainage Institute. The first meetings of that organization were held in Bozeman in January, 1920.24/ Brought into being partly as a result of the years of drought immediately preceding 1920, that organization showed an interest in irrigation that had not been previously expressed.

The objectives of the Irrigation and Drainage Institute were "to advance knowledge pertaining to irrigation and drainage, to encourage improvement in irrigation and drainage, to encourage improvement in irrigation practices, to encourage advancement in scientific and economic location, construction, operation, maintenance, and colonization of irrigated and drained lands, to promote the general welfare of settlers, to encourage scientific investigation on the better use of the State's water resources, to assist in securing adequate legislation, and encourage development of legitimate irrigation and drainage enterprises."25/

Montanan's Incorporated has had a committee on irrigation since the

23/ Ibid., p. 6.

24/ See "Montana Irrigation and Drainage Institute, Proceedings of the First and Second Annual Meetings," held at Bozeman and Billings on Jan. 15-17, 1920, and Nov. 8-10, 1920, respectively, pp. 5-6.

25/ Ibid., p. 3.
Institute was discontinued. Discussion of irrigation problems has had a place both in the reports and in the meetings of that organization.  

The State Legislature, in 1931, authorized an Irrigation and Water Right Code Commission. This body, whose term was to expire on Nov. 1, 1932, left no record of action other than a recommendation for a change in irrigation district law, in the matter of financing. No further action has taken place since that time except that allowed under the State Water Conservation Board. The program of that body is chiefly concerned with the physical use of the water supply, but in that connection is also concerned with water right disputes.

Suggestions for Changes in Water Right Laws—

Suggestions have been made by the various organizations for changes in Montana's Water Right Laws. In the first issue of its proceedings, the Montana Irrigation and Drainage Institute reported to its readers that a proposed irrigation code had been adversely acted upon by the irrigation committee of the Montana House of Representatives. The same organization in its third meeting adopted a resolution as follows:

"Whereas, it is recognized that the laws of Montana relating to the initiation, administration and adjudication of water rights are inadequate, are difficult of operation and not in keeping with the progressive

26/ Information gathered from the office staff of Montana's Incorporated in Helena.

27/ See Chapter 69 of Session Laws of Twenty-Second Legislature, 1931.

28/ Report of the State Engineer to the Governor, Nov. 50, 1932.


legislation of other western states; and, whereas, the administration of
the water resources of this state is of the greatest public concern; and,
whereas, no consistent advancement in agriculture in this state can be
assured unless a centralized control of the waters of the state is estab­
lished; now, therefore, be it resolved, that it is the sense of this
Institute that Montana should, at its next legislative session enact a
water code which will provide for the survey, administration, and deter­
mination of the rights to the use of all the waters of the State accord­
ing to the general plan established by a majority of the other Western
States. 31/

After failure to secure the passage of the code subsequent to this
meeting, there is this expression by the committee responsible for the
attempt: "The entire committee have made a thorough study of this code
with the intention of making revisions which would decrease the expendi­
tures necessitated...." 32/ The next session of the same organization
again reported the failure of the Legislature to pass a water code. 33/
Another bill for the establishment of a code is mentioned in the reports
of the Seventh session as being killed by an adverse committee report. 34/
Between the two attempts mentioned above to achieve the passage of a code,

31/ Montana Irrigation and Drainage Institute, "Proceedings of the Third
Annual Meeting," Great Falls, Dec. 8-10, 1921, p. 5.

32/ Montana Irrigation and Drainage Institute, "Proceedings of the

33/ Montana Irrigation and Drainage Institute, "Proceedings of the Fifth

34/ Montana Irrigation and Drainage Institute, "Proceedings of the
a Columbia River Board had been appointed by the Federal Power Commission, and a Missouri River Commission had been suggested by North Dakota. In the face of their expressed interest in interstate cooperation in the handling of water supplies, the Legislature gave as reasons for rejecting the code bill that there was no great necessity for a code, it would be an extra burden to the State Engineer, it would be expensive, and it would allow concentration of authority. However, one State Engineer of Montana has expressed a desire for a new code. In a statement before the organization of the Montana Irrigation and Drainage Institute, State Engineer McMahon said, "I recommend that our present water laws be changed to embody a system of records and regulations in harmony with the laws of our neighboring states, where the change has been so satisfactory."

---Reasons for Suggested Changes---

Many reasons are given for suggesting changes in water right laws. Initial impetus for such action was furnished by the Amendment in 1901 of the Carey Land Act that had originally been passed by the United States Congress in 1894. This act provided that the State authorize a Carey Land Act Board and set up the office of State Engineer to investigate works which the citizens of the State wished to build in cooperation with

35/ Montana Irrigation and Drainage Institute, "Proceedings of the Sixth Annual Meeting," Bozeman, Jan. 6-7, 1925, pp. 45-51.


37/ State of Montana, "Fifth Biennial Report of the State Engineer and of the Carey Land Act Board of the State of Montana," 1911-12. This was reiterated in succeeding reports, the Sixth, Seventh, and Eighth.
Further need for change in State law was brought about when the Reclamation Act, passed by the United States Congress in 1902, asked that projects wishing to acquire its help take advantage of the irrigation district laws of the State in which they were located. The office of the State Engineer was soon besieged by requests for information which was not available. Requests for funds to carry out investigations for the securing of this information were a part of the early reports tendered by the State Engineer's office. Some of the requests were, no doubt, a result of the booklets being published by the Department of Publicity of the Bureau of Agriculture, Labor and Industry of the State of Montana. These requests were for various kinds of information and led to the following summary by C. E. Atwood of "Why Montana needs a new code: (1) To help prevent the residents of the State from investing in enterprises, either private or otherwise, which are fundamentally unsound; (2) To protect the new settlers from becoming victims of fraudulent enterprises, and to assist them in becoming prosperous, thrifty citizens; (3) To make possible the organization of irrigation districts on a fundamentally sound basis; (4) To control the activities of promoters to the extent that they will be an asset instead of a detriment to the State; (5) To encourage outside capital to become interested.

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38/ Montana Agricultural Experiment Station, Special Report No. 9, "Water Resources of Montana and Their Use," Part I, Vol. II, Feb., 1941, p. 27.
39/ Ibid., p. 32.
40/ State of Montana, "Biennial Reports of the State Engineer and of the Carey Land Act Board of the State of Montana."
in our various irrigation enterprises; (6) To eliminate the difficulty
now experienced in obtaining loans on lands irrigated by privately owned
and unadjudicated rights; (7) To make it possible to determine the value
of the water rights already in existence in an economical and efficient
manner; (8) To obtain an equitable and economical distribution of the
water of the State, in order that the greatest returns may be realized
from the application of this natural resource to the land; (9) To central-
ize all records pertaining to the waters of the State for the purpose of
making them readily available and of some material assistance to our
future development; and, (10) To make the necessary development of the
irrigation enterprises of the State of Montana possible.42/

42/ Made by C. E. Atwood in the "Proceedings of the Third Annual Meet-
ing" of the Montana Irrigation and Drainage Institute, p. 91. Some
of these are in large part a reiteration of the points made by
Elwood Mead in U. S. D. A. Bulletin No. 58, "Water Rights on the
Missouri River and Its Tributaries," 1899, pp. 15-16.
MONTANA'S PRESENT SYSTEM OF WATER RIGHTS ADMINISTRATION

Water rights serve as limitations of the uses to which water may be put and by whom it is used. A water right in its simplest form is the putting of water to use. A water right, in Montana as in other semi-arid states, is acquired under the doctrine of appropriation; the ability to take water from a stream for use, rather than, as in most Eastern and Mid-Western states, under the riparian doctrine; the right expressed by owners on the bank of the stream to have water flow in its natural channels unmolested by the users above. If related to water in a flowing stream, a water right allows use only, but if the water has been stored the right gives possession of the body of the water.

Establishing Water Rights

Appropriation, as used in Montana to secure a water right, is the taking of water for actual use. This is accepted as a right to the use of the water unless it is proven that other appropriations were prior in time. Each use of the water at the present time depends on the ability to get and retain the supply needed. Sufficient supply is available in some areas for all uses of water. In these areas but few disputes have arisen within the State and all that is necessary to continue the use is to continue taking the amount needed. In this case the right was acquired by use alone and, although the appropriation may be recorded, there are many individuals using water for which they have made no record of appropriation. For information as to these rights, the only source is a field survey, which has been carried out only in limited areas.
Adjudication of Water Rights

The supply of water has often been insufficient to fill the demands for the various uses in Montana. As water is one of the principal limiting factors governing the uses which may be made of land and the output of power, its use often has continued for only a short time before interference has presented difficulty. Interference is often the opening wedge for a dispute over which rights should have precedence and for a consequent adjudication in court according to the procedure set up by the Montana legislature.

Court Procedure

Such action begins through a complaint issued by one or more users against another or other users on the stream. All individuals using water from a stream may be called into court, if the plaintiff so desires, in order that the validity of each individual right may be determined as against all others on the stream. For this procedure each individual must furnish information that will establish the dates of his right, the amount of water originally used, the year and amount of any increased uses since the original, the location of the use (requiring a map), the water supply, the distance of the place of use from the source, and the use to which the water is put. As Mead puts it, "Every condition surrounding the creation of a water right makes the need of an absolutely correct and definite statement of the purpose of the appropriation imperative. The time required to use the water and the fact that conflicting rights are being established elsewhere on the same stream at the same
time, make it desirable that each claimant should describe his own project so clearly that no one else can contest his right because of changes, and that all others shall be equally specific in order that he may be fully informed, when he begins, of all the possible opposing rights which can be acquired.\[43/\] From a court adjudication all rights emerge, as determined by the Judge, with a right to the use of a specified amount of water as against other rights on the same stream.

An adjudicated water right indicates that sufficient evidence has been given in court by the water user or by witnesses in his behalf, to prove that a certain amount of water was used as of a certain date. Of such action there is a record kept in the office of the Clerk of the Court for the county in which the case was held.

These water rights are rights only to the amount of water available and are not a guarantee that it will always be available. When the amount is sufficient for all uses, the fact that water rights exist seldom will be mentioned. When the amount of water is limited it is divided among users on the basis of the rights to its use as they have been decided by the court. Persons using water under rights which were most recently established are the first to have their headgates closed when the supply becomes insufficient to furnish water to all.

Water is of such great importance in the semi-arid West where there are numerous uses for it and numerous users wanting it at the same time,

that losses arise if the supply is not sufficient to furnish all that is desired. Trouble sometimes arises when older rights get their share of the supply while the later rights are cut off. This often leads to the appointment of a water commissioner by those persons holding legal rights to the use of the water supply.

Water Commissioners' Appointment and Duties

The appointment of a water commissioner or commissioners is dependent upon the application of the owners of ten per cent of the water rights affected by the decree on a stream or streams to the Judge of that district wherein the decree has been entered. If a water commissioner is appointed, he is employed by the holders of rights on a stream and is paid by them. The information contained in the decree is used as a guide to apportion water among those individuals to whom it has been decreed. It is the duty of the commissioner to measure and distribute the water and to keep all owners of water rights from personally interfering with distribution of the water in the stream. 44/

Recording Water Rights

In Montana, water right records are found only in the several counties where the water is used.

Appropriations

In the County Clerk and Recorder's office all notices of appropriations of water are supposedly entered in a "Water Rights Record." In one of the volumes of this record, on the page and volume indicated in an

index, the notice of appropriation information is recorded. If, as frequently happens, the record of appropriation is not found in the index and record already mentioned, reference to the "Miscellaneous Index" or the "Deed Index" may locate it. Mining claims and water claims are found both in the "Water Rights Index" and in the "Lode Index." It may happen that their filing has been neglected in the former and they may be found only in the latter.

The notice of appropriation is supposed to contain a statement as to the quantity of the water claimed, the purpose for which it is claimed and the place of intended use, the means of diversion, the date of appropriation, the name of the appropriator, the name of the stream and the place of diversion. If this information were complete it would be possible to fill out completely, with the exception of the name and address of the 1940 owner, a form similar to that shown in Figure 1. This form was made up by the W. P. A. for use in W. R. 5116, "Water Resources of Montana," and is in use only by them. It has a place for recording all information pertinent to the water right, but it seldom happens that all of the statements on the form can be completed from information on record regarding each appropriation.

Approximately 48,000 appropriations are on file in the various County Clerk and Recorder's offices of the State. These appropriations

45/ Information as to the 1940 owner (which completes the information shown in Figure 1) is taken from records in the County Assessor's office.

46/ Actually there are approximately 75,000 individual records. However, when new counties have been formed, copies of the records located in the territory covered by the new county but on file in
<table>
<thead>
<tr>
<th>FORM A-1</th>
<th>Notice of Appropriation</th>
<th>CODE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. County</td>
<td>Book</td>
<td>Page</td>
</tr>
<tr>
<td>2. Name of Appropriator</td>
<td>Address</td>
<td></td>
</tr>
<tr>
<td>3. Date Appropriated</td>
<td>Date Filed</td>
<td>Net. Approp.: W.I.</td>
</tr>
<tr>
<td>4. Name of Stream</td>
<td>Tributary</td>
<td>Basin</td>
</tr>
<tr>
<td>5. Point of Division</td>
<td>Sec.</td>
<td>Twp.</td>
</tr>
<tr>
<td>6. Purpose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Description of System</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**LAND DESCRIPTION OF INTENDED PLACE OF USE**

<table>
<thead>
<tr>
<th>Subdivision</th>
<th>Sec.</th>
<th>Twp.</th>
<th>Rng.</th>
<th>Tot. Acre</th>
<th>1940 Owner</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Remarks (Parting to Use, etc.)

Figure 1. An Appropriation Schedule

call for the use of some 225,000,000 miner's inches of water, enough to irrigate that many acres (Montana law makes it a general rule that one inch to the acre shall be considered proper in absence of information showing a greater or lesser need), or more than twice the total amount of land in Montana. The value of records can be questioned which permits the appropriation of such non-existent water, yet within this group of records there are many that can be verified as valid rights. It often happens that the present user does not have complete information about recorded appropriations on water which he is putting to use. There is no evidence in the County Clerk and Recorder's office of a water right unless it is recorded. Many rights that have been recorded have had no further publicity and no check has been made to see whether or not they represent rights that have been used, and little reference is made to these records unless a request is made by some person or agency for in-

46/ (continued) the old are transcribed and a copy filed in the new county. The figure given in the text (48,000) disregards these duplications. These figures are estimates based on preliminary figures available from the "Water Resources of Montana" study which have been compared with and reconciled as closely as possible with those gathered in the compilation made by the State Engineer of Montana and reported in the Sixth Biennial Report for his office made in 1915.

47/ As compiled by R. R. Renne in Montana Agricultural Experiment Station Bul. No. 316, "Montana's Irrigation Resources," (The information was a compilation of figures gathered by the State Engineer's office.)

48/ Investigations carried on in Treasure and Big Horn Counties, under the "Water Resources of Montana and Their Use" study, show this to be true, but no accurate figures are yet available which would show the percentage of valid rights which have or do not have recorded appropriations.
formation. However, as a result of such requests, individual rights for a particular stream are verified from time to time.

Adjudications

Records concerning adjudications are of the same category as are records of court actions and are kept in the office of the Clerk of the Court. For these actions there are three indexes, the "General Index to Court Records," the "Index to Civil Actions," and the " Judgment Docket." In the "General Index to Court Records" is a record of all cases including those on water rights. These are indexed according to the kind of action involved. Usually all water right cases are also in the "Index to Civil Actions." Reference to the location of water right cases in the "Book of Decrees" is given in the "Index to Civil Actions" by page and case number. Information on all cases is usually in the "Judgment Docket." Only the case number and the date on which the separate actions which make up a case, such as the date the complaint was filed, the time of issuance of summons, the date of filing answers and rendering of judgment, are recorded in this "Docket." It occasionally happens that cases concerning water rights are recorded in this book and in no other. When this happens there is not much information available. Information concerning a case is given in the "Book of Decrees" but if additional information is desired the "File Cases" can be referred to. One file case contains all the papers having to do with each particular case. The Clerk of the Court often has made up and available a record of the case numbers which have to do with water right cases. If this has been done he knows just where to look for the information having to do with any stream. It sometimes
happens, as in three counties in Montana,\(^49\) that a summary of decreed rights is made for one stream or several so that it is possible to get the person's name to whom the water was decreed, the date of his right and the number of miner's inches decreed. Where this occurs, it is because of the extra work done by the incumbent in the County Clerk and Recorder's office.

Data as to rights on individual farms or streams may be taken from the records for use by their owners or by agencies to show that a water title is in force on certain lands. The form in Figure 2, showing the records as they might be recorded, is in use only by the W. P. A. in Project W. R. 3116, "Water Resources of Montana and Their Use," and is used by them to record the water decree information from the Clerk of Court's office. The information shown on this sample form (Figure 2) is taken from a decree recorded in the "Book of Decrees," Book 5, page 49, Meagher County. The information shown is typical of that available from the recorded decrees in many counties. This form, as it is being used in the field in the W. P. A. study already mentioned, is combined with that shown in Figure 1. On that part shown in Figure 1 would have been the name of the stream and possibly some additional information. In this particular case, the name of the stream (Willow Creek) was given in addition to that information shown in Figure 2. Information about these rights has usually been gathered by various agencies and groups for their own purposes.

\(^49\) Granite and Cascade Counties, according to information from Harold Bowen, Project Supervisor, W. P. A., and Park County each have some of these records. In Granite County a few are available. In Cascade County are only two, and copies of both of these are for sale by Clerk and Recorder. In Park County quite a number are available.
### Decree

1. **Case No.**: 1616  
2. **Date Dec. 12, 1906**  
3. **Act Decreed**: N.I.  
4. **CFS**: 25  
5. **AcFt.**:  

#### To Whom Decreed

- **The Town of White Sulphur Springs**  
- **Address**

#### Name of Ditch

- **Nec. Csp. (CFS)**

#### Date of Priority

- **Summer, 1868**
- **Purpose**: Municipal & Domestic Purposes.

#### LAND DESCRIPTION OF PLACE OF USE AS DECREED

<table>
<thead>
<tr>
<th>Subdivision</th>
<th>Sec.</th>
<th>Twp.</th>
<th>Rgn.</th>
<th>Tot. Acres</th>
<th>1940 Owner</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33</td>
<td>9</td>
<td></td>
<td>72</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Remarks (Present Use Status, etc.)

(Show Additional Information on Reverse Side)

---

**Figure 2. A Decree Schedule**

**Source:** Work Projects Administration, Project O. P. 60-1-01-125, W.

R. 3116, "Water Resources of Montana and Their Use".
According to the 1950 Census, rights covering 805,729 acres have been validated by the courts.50/

Montana’s Water Right Administration Problems

In Montana 1,687,602 acres of irrigated land 51/, 14 power plants 52/, many municipal water systems and various recreation facilities all demand their share of the water supply. Potential irrigation of an estimated possible 7,000,000 acres 53/ (the development of which has recently been accelerated) 54/, proposed power projects, and regulation in Montana for

50/ For the 43 counties for which a summary has been completed, the "Water Resources" study shows 544,714 miner's inches. Seven of the remaining counties either have no decrees or decrees covering a very few inches of water. The total in the remaining six counties, it is estimated, would bring the number of inches decreed to approximately the same as those given in the Census.


54/ For instance, John C. Page, Commissioner of Reclamation, in a letter to the President, submitting the "Program for Water Conservation and Utilization" (77th Congress, 1st Session, Document No. 18), tells of the acres being brought into operation under the two Buffalo Rapids projects and the Saco Divide project. Respectively, these are Buffalo Rapids No. 1, 15,500 acres, No. 2, 11,600 acres, and Saco Divide, 9,000 acres. From the "Preliminary Report on Development of Economic Opportunities in Montana for Migratory and Stranded Families," the State Water Conservation Board, cooperating with the Public Works Administration, has completed and under construction storage for 360,000 acre feet of water and has made contracts to sell the same to 2,189 purchasers thus creating an adequate supplemental irrigation supply for approximately 360,000 acres of land and has constructed 109 storage dams, 50 stockwater dams, 43 flood diversion dams, and 53 miles of canals. These 208 units will afford 107,000 acre feet of storage with 50,000 irrigated acres below storage and diversion dams. In this same report, as a summary of projects available and potential, are works calling for sufficient water to irrigate 1,385,528 acres (some of these are already included in the tabulation given above).
uses elsewhere, are additional uses for the State's water. The limiting conditions of precipitation, size of drainage area, amount of water supply, etc., are causing users in some areas to become increasingly aware of the discrepancy between the natural limitations, the possible uses of the water supply, and the uses possible under present administrative methods. Division of water is being made first in those areas where the people are aware of the problems, but eventually all water will likely be controlled. These factors accentuate the need for a perusal of administrative procedure. The way in which the water supply is divided affects this study by indicating the problems that have arisen out of Montana's present methods of water right administration.

**Indefinite Procedure**

In Montana under the present system of administration there is no exclusive procedure by which water rights may be established. There is a procedure set up in law, but compliance with it is not required. Of two rights established at the same time, precedence, upon adjudication, is given to the right established in compliance with the procedure set up in law. Thus, though the establishment of a water right requires only the use of water, often it is advantageous to comply with the procedure set up in law. Upon adjudication of the rights to the water of a stream, the recorded right has evidence of priority as to date. Holders of unrecorded rights must depend upon testimony given in the court to determine the date of the beginning of their right.

The figures presented in the 1930 Census show that 50.5 per cent of the irrigated lands in Montana have had their rights adjudicated. If
the amount of water decreed coincided with the amount recommended under
law, one miner's inch to the acre, then 805,729 miner's inches would have
been adjudicated. Earlier figures compiled in Montana indicated that
465,055 miner's inches had been adjudicated in the State. 55/

A preliminary summary of the material gathered from 371 streams in
the present W. F. A. study shows that 544,714 miner's inches have been
decreed in 43 counties. The returns from seven counties indicate that
either there are no decrees in those counties or that decrees cover only
a very small number of water users. Within six remaining counties is a
considerable acreage of irrigated land, and it is possible that some
rights have been decreed.

Cost of Adjudication

Actual data collected on recently adjudicated streams in Montana
show a cost for adjudication of well over one dollar per miner's inch of
water. (See Table I.) A conservative estimate would therefore place the
costs of adjudications so far made in Montana in the neighborhood of
$1,000,000.

---Individual---

The cost of cases as shown in Table I does not include many of the
incidental expenses connected with adjudication. Each person entering
in the decree must appear in the court. He usually must be on call to
appear at any time required during the time the court is in session. Extra
trips to town are necessary. Meals and even lodging are also incidentals.

55/ Typewritten report compiled by Jeff Matthews, Research Assistant,
Department of Agricultural Economics, Montana Agricultural Experi-
ment Station, 1954.
### TABLE I.

**ADJUDICATION COSTS PER MINER'S INCH AND PER IRRIGATED ACRE**

**OF WATER RIGHTS RECENTLY ADJUDICATED IN MONTANA**

<table>
<thead>
<tr>
<th>Case</th>
<th>Number of Decreed Rights</th>
<th>Total Cost</th>
<th>Miner's Inches Decreed</th>
<th>Cost Per Miner's Inch</th>
<th>Irrigated Acres</th>
<th>Cost Per Irrigated Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>6116</td>
<td>4864</td>
<td>1.25</td>
<td>4496</td>
<td>1.36</td>
</tr>
<tr>
<td>2</td>
<td>18</td>
<td>7760</td>
<td>3775</td>
<td>2.06 a</td>
<td>2389</td>
<td>3.25 b</td>
</tr>
<tr>
<td>3</td>
<td>37</td>
<td>9315</td>
<td>5951</td>
<td>1.50</td>
<td>3300</td>
<td>2.59</td>
</tr>
</tbody>
</table>

a. With the addition of $6,500, the cost of an old decree, this would be $3.77.

b. With same addition, as in "a", this would be $5.97.
Case No. 1 was in the process of being adjudicated for three years and the final trial took eleven days in court. In the process of adjudication of Case No. 2, the complaint was filed on May 10, 1934, and the decree was not rendered until June 1, 1938, after nine days in actual court proceedings. Case No. 3 was filed on October 4, 1934, and was decided on June 4, 1938, after a trial period of fourteen days. Engineers' fees were felt to be satisfactory, but much dissatisfaction was expressed at some of the attorneys' fees. Some attorneys, as an admitted practice, take into consideration in their charges the ability to pay and the losses they expect to sustain from not being able to collect. That may be the just way to charge, but the fact that charges are determined in that way is noticed by litigants, as indicated by comments made to the author. Attorneys charge more for service to the plaintiffs than to defendants because of the fewer number of cases of the former that they can handle at the same time.

In Case No. 3, three plaintiffs paid $2,500 of the $9,315 costs and received 330 inches of the 5,851 inches of water involved. In other words, by incurring 27 per cent of the costs they received only 7 per cent of the decreed water. Their costs were excessive in relation to the inches of water they received as compared to the costs paid and the water received by the defendants.

Water rights which have been appropriated but never recorded have been acquired at no expense to the owner. This is not to say that the owner has not spent money on making water available to his use; it is only to say that he has spent no money on acquiring objective evidence
that he has a right to the use of a certain amount of water. For recording there is a $2.00 filing fee. Thus the 48,000 appropriations that have been filed in the County Clerk and Recorder's offices in the State have cost $96,000. The cost of transcribing the approximately 35,000 records that have been changed from one county to another represents an expenditure of some $2,500. 56/

Each individual litigant has made an expenditure of money. In addition, each case has been an expense to the State. For various purposes and at different times, these decrees have been copied from county records.

---State Agencies---

A compilation of all records pertaining to water rights was completed in 1915 by the State Engineer's office through cooperation with the abstractors in the various counties. It would be very difficult to estimate the exact money cost of that undertaking, but an indication can be obtained by a comparison with the study 57/ now being carried on by the Work Projects Administration. This study so far has required 418 man months of labor to transcribe and gather these records in the field, at a cost of $70.00 per man month. This cost includes charges for supervision and administration of keeping a worker in the field. The total expenditure has been $29,260. Adding this to the sum already spent for record-

56/ This figure is based on the fact that most entries appear to have less than 100 words as indicated by a typical entry from commissioner's records, "Ordered that ... be employed to transcribe records from Gallatin County belonging to Park County at ten cents per folio (100 words) to be paid out of the Contingent Fund," taken from "Commissioner's Journal" of Park County, Vol. I, page 3, June 8, 1887.

57/ The Survey, W. R. 5116, "Water Resources of Montana and Their Use."
ing makes at least $127,760 that has been spent on appropriation records, and this does not include the compilation that was made by the State Engineer.

Decrees also have been tabulated in County offices and collected at the irrigation project headquarters. This task has consumed 120 man months of labor which at $70.00 per man month amounts to $8,400.

The State Engineer's office in Montana received an appropriation of $26,399 for the 1941-1942 biennium to carry on its activities, but stream gauging and work on interstate waters absorbs most of this amount.58/

---Federal Agencies---

Although actual figures were unobtainable, money has been spent from time to time and is now being spent by various agencies on studies concerning Montana's water use. The Bureau of Reclamation has been making a study of ownership and use of water of the entire Yellowstone, Missouri, and Bitter Root basins. They have maintained offices at Billings, Great Falls, and Helena to carry on these studies. Field crews have made complete reconnaissance surveys of the entire valleys.59/ There has been cooperation between this agency, the State Water Conservation Board, and the Montana Power Company in some of this work. Studies of similar nature have been carried on in the Missouri and Yellowstone Valleys by the Army Corps of Engineers.60/ Including the amounts already

58/ Typewritten copy of "Appropriations of the State Engineer's Office," for 1941-1942.

59/ National Resources Planning Board, Memorandum to "Member Upper and Middle Missouri Drainage Basin Committees "A" and "B", Field Office, Omaha, Nebraska, October 26, 1940, Mimeographed Pamphlet.

60/ Annual Report of Montana Planning Board as of December 31, 1940.
mentioned, the present W. P. A. study has so far expended $110,000 of $176,000 of Federal funds that were set aside and $18,000 of the $41,000 appropriated by the Sponsors (Montana State College).

It is impossible to estimate the total amount of money expended on these studies over a period of years. However, the foregoing figures quoted represent the minimum amount already spent on such activity.

**Insecurity of Acquired Rights**

Montana's present method of water rights administration has survived the many attempts to bring about its change. This might be taken as an indication that it has, in the main, fulfilled the expressed needs for it. This method gives the use of water, with few exceptions, to those first making an appropriation. For many who have acquired rights in this way and who have never expended further funds to have their right adjudicated, the present method of administration in Montana has probably been the least expensive. They have, no doubt, received as much return from their right as they could have in any other way. Citizens of Montana have contributed, through taxes, to studies which various agencies have made. However, whether they contributed in exact proportion to the return they have received from the use of water is problematic.

Water right administration, as indicated by information from various owners in Montana, does not allow full protection of existing rights.

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Exceptions have occurred where courts have decided that a later case may be more beneficial than an earlier one. Cases are rare in Montana.
Information gathered in W. R. 3116, "Water Resources of Montana and Their Use," showed that one right had been taken through court on five separate occasions. In Case No. 2, shown in Table I, two rights went through the courts two separate times at an expenditure of almost double the cost of the average decrees. Another case, one of several possible examples, was tried three separate times. In the first two times in court, two rights were not even mentioned, which in the third trial received the two rights to water in the stream prior to all others on the stream.

**Incompleteness of Water Right Records**

The decree is a useful instrument in water right administration, but the information concerning decrees, at the present time, is not always as complete as desired. The number of inches of water to which a right is entitled, as of a certain priority, is stated in the decree. This is no indication, however, of the amount of water available at the time needed for use nor of how many rights precede it in date. In addition there is no assurance given in the decree that the water to which it is entitled will be supplied by the flow of water in the stream. There may be rights on the stream which, when totaled, demand a great deal more than the flow of water in the stream. The case shown as No. 3 in Table I is a good example. The water commissioner's reports show that the biggest flow distributed at any one time of this stream was 2,792 inches, yet the decreed rights call for 5,851 inches of water. Even this

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62/ On the Ruby River on which rights are now under dispute.

flow, small as it was in relation to the number of inches decreed, lasted
for only a short time in the seasons of 1939 and 1940. In those seasons
the commissioner measured water from the time of beginning irrigation
until the 10th and 12th of August, respectively. In 1939 there were only
581 miner's inches of water and in 1940 only 186 miner's inches of water
to be distributed on those dates mentioned.64/

There are people who feel that the present methods of water right
administration have advantages over any other. The following expressions
of opinions from lawyers in Montana indicate their attitude: "These
records are now fully available in the office of the Clerk of the Court
of each county where irrigation is used" and also, that "The present
Recorder's office is adequate and that is where the lawyer expects to
find the records when he needs them" as well as "I ... have found the
laws quite sufficient including the method of recording and keeping rec-
ords."65/ However, these opinions cannot be substantiated from informa-
tion collected in this study.

Inaccessability of Water Right Records

Studies have shown that records compiled by the State and other
agencies are relatively inaccessible. The following illustration will
indicate the difficulty which one prospective settler encountered in ob-
taining sufficient knowledge for settlement in Montana. This is a
lawyer's answer to a client concerning inquiry about a project in northern

64/ From Water Commissioner's reports on Meagher County, filed in the
office of the Clerk of Court.

65/ Taken from letters received by the author in the course of this study.
Montana. "I was unable to state to him whether he would have a water right in the event of the purchase of the land, or, whether his water right would be subject to other rights which would in effect defeat or render practically useless the water rights upon the land in question. The result was that my client refused to purchase the land." 66/

Heads of several agencies now spending money for such information were asked the question, "Are you able to get the information you need concerning water supply, water rights, water use (present and potential), ownership and duty from records as they exist and are kept at present, in Montana?" In answer, Tom Horsford, State Farm Security Supervisor, says, "Securing such information is difficult, involved, time consuming, and results often incomplete. The reason is naturally that records are usually incomplete; such records as do exist often must be assembled from several sources; and finally, they must often be supplemented through field investigation." 67/ In answer to the same question, Ray B. Haight, State representative of the Bureau of Agricultural Economics, says, "We are not able to get needed information on the material indicated in the question given above because it is not compiled." 68/

The Bureau of Agricultural Economics of the United States Department of Agriculture has published reports on some of the drainage basins of Montana and is in the process of carrying out further studies as a basis of still other reports. For information they have gone to the

66/ Taken from letters received by the author in the course of this study.
67/ Letter dated December 31, 1941.
68/ Letter of December 8, 1941.
Agricultural Adjustment Administration, Farm Security, Soil Conservation Service, Geological Survey, Weather Bureau, Montana State Water Conservation Board, Montana State Agricultural Experiment Station, Indian Agencies, National Farm Loan Association, County Land Use Planning Committees, County Agents, Federal Land Bank, State Geologist, School of Mines, State Engineer, Water Commissioner and their records, Montana State Extension Service, soil surveys, Forest Service, Rural Electrification Administration, Division of Crop and Livestock Marketing, State Land Planning Specialist and State Bureau of Mines and Geology. Jeff Flannigan, Associate Water Planning Analyst with the Bureau, who has been helping to write up the above mentioned and similar reports, now transferred to Montana from New Mexico, says, "Work that in New Mexico would take at most a half day to get out of the State records there takes about two months to get in this State. Information is better even then, when taken from New Mexico records, than when acquired in Montana."69/

69/ From interview of April 5, 1942.
A central office is the means of carrying out the provision, allowed by the United States Congress, that the State shall govern the use of waters within its boundaries. A central office is set up by the State Legislature. It is a branch of the State government set up by law to administer the water rights in the State. Usually this branch is in connection with the State Engineer's office and he is the individual put in charge. The policy to be adopted by the central agency in regard to water resources of the State is expressed in the code of law which sets up the central office. The central office subsequently develops its procedures.

Administration as it Functions in Other States

Of the seventeen semi-arid states in which irrigation is practiced, all but Montana have some form of centralized administration of water rights. Kansas has laws allowing such an institution but has not yet made complete administration effective.70/ Physical conditions, in these semi-arid states, vary widely and individual procedures followed in administering water rights are not alike. However, the systems set up in the "Water Codes" of these western states follow a general pattern and, as these have been the subject of numerous books and bulletins, they will not be dealt with at length here. Information is available on the water right laws of all these states, but direct information for this study was

70/ United States Department of Agriculture, "State Legislation for Better Land Use," a special report by an inter-bureau committee, 1941.
furnished by only eleven of the seventeen states mentioned above. The agencies set up in these eleven states to administer water rights are: in Washington, the Department of Conservation and Development with a Division of Water Resources; in Nebraska, the Department of Roads and Irrigation; in Idaho, the Department of Reclamation; in North Dakota, the State Water Conservation Commission; in Oklahoma, the Planning and Resources Board; and in South Dakota, Oregon, Utah, Wyoming, and Nevada, the Office of the State Engineer.

The codes cover the general situation having to do with water rights but the State Engineers, or persons in like capacities, are given broad powers to make rules and regulations which they feel will best carry out the provisions of the code. In the Wyoming water code, which is typical of the laws of the other western states, "waters of all ... are hereby declared to be the property of the State.... There shall be constituted a board of control, to be composed of the State Engineer and superintendents of the water divisions which shall, under such regulations as may be prescribed by law, have the supervision of the waters of the state."71/ In Oklahoma, "The State Engineer shall make all necessary rules and regulations to carry into effect the duties devolving upon his office and may change the same at his discretion."72/

Mead, a number of years ago, stated that: "Every working code of irrigation laws should provide for three things, and its success depends


largely on the way this is done. These are: (1) an accessible and trustworthy record of preliminary filings on streams; (2) a clear definition of water rights and a simple, orderly, and inexpensive procedure for their determination; (3) some means of dividing streams in times of scarcity in order that the holders of prior rights may be protected.75/

To secure an accessible and trustworthy record under the provisions of a water rights code it becomes the duty of the central office to set up the procedure for citizens to follow in acquiring a water right. After the application has been received, the first step in the above mentioned states, it is the duty of the central office to see that an investigation is made. If it is found that the application is valid in regard to supply and beneficial use, a certificate is granted showing the ownership of that right. The main difference between the procedures of the different states in regard to the acquirement of rights is that of granting a certificate. In some states a certificate must be granted whether or not there appears to be sufficient water to supply the desired appropriation, but in most the certificate is granted only when this fact is substantiated through investigation. In these states, once it has been established, a central office becomes the only means through which a water right may be lawfully acquired. The filing of an application with the State Engineer is demanded by law and must be complied with. In Washington, for instance, "subject to existing rights all waters within the State belong to the public, and any right thereto, or to the use

75/ Mead, op. cit., pp. 15 and 18.
thereof, shall be hereafter acquired only by appropriation for beneficial use and in the manner provided and not otherwise.\textsuperscript{74} In Oregon, "rights to the use of unappropriated waters are initiated by filing an application with the State Engineer."\textsuperscript{75} In Nebraska, "any person ... intending to appropriate any of the public waters ... shall make an application."\textsuperscript{76} In Utah, "no appropriation of water may be made and no rights to the use thereof initiated and no notice of intent to appropriate shall be recognized except application for such appropriation first be made to the State Engineer in the manner hereinafter provided and not otherwise."\textsuperscript{77} In Arizona, "any person, including a municipality, the State, or the United States intending to acquire the right to the beneficial use of water, shall make an application to the commissioner for a permit to make an appropriation of water."\textsuperscript{78} In line with the second of Mead's requisites, Harding says that a complete and reliable record of all old rights is the foundation for their protection as well as the basis for a state administrative system.\textsuperscript{79} Such a record is compiled by making surveys of the irrigated lands and determining the way in which water is to be apportioned to that land. Information received for this study shows that surveys are made by the

\textsuperscript{74} State of Washington, Department of Conservation and Development, Division of Hydraulics, "Water Code relating to the regulation and control of waters within the State and rights to the use thereof," April, 1933.

\textsuperscript{75} Lewis, John D., "The Oregon System of Water Titles," Office of the State Engineer, Bul. No. 2, Salem, Oregon, April 15, 1942.

\textsuperscript{76} Nebraska Department of Roads and Irrigation, "Laws Governing Irrigation, Water Power and Drainage of Natural Lakes," 1936.

\textsuperscript{77} "Water Laws of Utah," 1941.


\textsuperscript{79} Harding, S. T., "Water Rights for Irrigation," Stanford University Press, Stanford University, California, 1936, pp. 7 and 169.
central office but that the instigation of determination proceedings may be made either by the water users or by the central office. Proceedings of adjudication may be carried out by the officials of the central office or by the court directly. Appeal to the court, in any case, is never denied.

In Wyoming, the state which first brought a "water code" into being, the board of control prepares notices and sets dates for the hearing of adjudication proceedings. Each commissioner in his own division is acting judge for the taking of testimony in regard to any case. Claimants are furnished with blank forms for their statements. A date is set for contesting any claims. After this procedure a hearing is held for determining priorities and then certificates are issued for the right.

Distribution of water under a code is generally placed in charge of commissioners. In Wyoming superintendents control the commissioners of their division in the matter of distribution of water. Each of the superintendents (there are four in Wyoming) is responsible to the State Engineer. The commissioners are appointed by the Governor to divide water among users according to their priority.80/

In Utah, "whenever in the judgment of the State engineer, or the district court, it is necessary to appoint one or more water commissioners for the distribution of water from any river system or water source, such commissioners shall be appointed annually by the State engineer, after consultation with the water users."81/

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In Nevada, "There shall be appointed by the Governor upon recommendation of the State engineer, one or more water commissioners for any stream subject to regulation by the State engineer." 82/

Proposed System of Administration for Montana

Any system of central office administration recommended for Montana would likely be patterned after systems as they have been developed in other states. Under the system proposed for Montana by the members of the Montana Irrigation and Drainage Institute, "The State Engineer shall have general supervision of the public waters of the State and of the offices connected therewith... He shall inspect and require needed information to be presented on all water works for which it is felt necessary to do so. He shall regulate and control the diversion and measurement of water. He shall keep necessary records. He shall render a biennial report to the Governor. There shall be district water commissioners appointed by the State Engineer whose duties shall be to divide the water supplies of their respective districts." 83/

It has been proposed, as a part of this system, that Montana laws make it mandatory that "a certified copy of notices of appropriation of water be forwarded to the State Engineer by the County Clerks." It is suggested that "the County Assessor prepare forms for all water right claimants." The "County Assessor is to assess a water right license tax."

83/ See Proceedings of the Fifth Annual Meeting.
He is to "prepare statements from returns" and to make them public records. "Failure to make return is prima facie presumption of abandonment."

Under the proposed system for Montana the State Engineer, upon the filing of a petition claiming the right to the use of water by one or more persons within the State, may, if he considers it to the interest of the public, file a plea for adjudication with the court of the district, wherein the water flows, which is most convenient to the claimants of water rights. He shall issue a summons to all shown to be interested in using water from that supply. Defendants shall within twenty days file verified answers with the Clerk of the Court. The case shall then be referred by the judge to the State Engineer for the taking of testimony at a hearing the time and dates of which are the duty of the State Engineer to set. The expenses are to be taxed as costs. The State Engineer files with the District Court a transcript of the testimony together with a full and complete report and findings which shall be the basis of the court's decision. 84/

Meeting Montana's Water Right Administration Problems

Economic use of water depends upon a proper balance between water supply and land and facilities for the beneficial use of the water on the land. Lack of information leading to failure in achieving this balance, either by over- or under-appropriation, leads to waste. The purpose of administration of water rights in a state should be to achieve this balance as nearly as possible.

84/ Fifth Annual Meeting, pp. 37-53.
Harding states that "there are three principal parts of legislation governing water rights: (1) Acquisition of new rights, (2) Adjudication of old rights, and (3) Administration of rights." The first two of these establish the basis for the latter.

Establishing a Basis for Administration of Water Rights

No exclusive procedure has in the past definitely regulated the acquisition of water rights in Montana. There has been a lawful method, but this has been a suggested procedure instead of a compulsory one. This has allowed many rights to be acquired about which there is no record.

Acquisition of New Rights

The adoption of a definite exclusive procedure such as that given in Montana's proposed code would make it mandatory that records be made of appropriation and would result in records which are not actually in use being cleared from the books in which are recorded the rights.

Under procedure of this nature the appropriator would have a bona fide right as soon as it is passed upon by the State Engineer's office. He would be required to make application to the office and in turn would be dependent on it for gaining a right. Such a right, if all rights on the stream had been acquired through the central office, would in all respects be the same as an adjudication.

The cost of acquiring a right under this method would involve the sending of the application to the State Engineer, an examination of the

place of use, and an issuance of a certificate. A charge would be made for the certificate, but the procedure followed in the examination would be entirely at the discretion of the Supervisor of Hydraulics. The charge as made in Washington amounts to about $15 for a right to water sufficient to irrigate as much as twenty acres.\textsuperscript{86} In Utah $2.50 is charged for examining and filing application to appropriate ten second-feet of water and $1.00 for each additional second-foot. "The engineer shall charge not to exceed $10 a day for himself and $5 a day for his assistant for conducting field examination.\textsuperscript{87}

Water right requests would be examined at the time of their inception. The granting of a certificate would confirm this. When rights were subjected to an adjudication this information would be already at hand. By making access to the records so convenient, the need for various studies such as have taken place in Montana in order to collect these records would be unnecessary.

What records were on file would have been weeded out so that abandonments would be a matter of record and there would be no rights which were not on record.

Rights acquired under this procedure would be examined by experts in water flow and water duty. From its inception a right would be more secure because of a better understanding of what a water right was and what it should do.


\textsuperscript{87} "Water Laws of Utah," 1941, p. 21.
Montana's present method of adjudicating water rights, as has already been pointed out, has recently been changed to allow the State Engineer to introduce action on any stream of Montana whenever he sees fit to do so.

This change gives the present method of adjudicating old rights the advantages under law of allowing most of the adjudication proceedings to be carried on under the guidance of experts in water right matters. This allows under the present method some of the same advantages that have been gained by putting a central office into effect in other states.

Instigation of water right determination proceedings under a central agency is by that authority. The head of the agency and his staff are versed in water right problems and have had much experience. All the information on the situation in regard to any place is readily available and he can immediately get it. It is possible under this type of proceedings to make water appurtenant to land. It is then possible to map the irrigated lands and show the source of water supply. See Figure 3.

In Oregon, "A published record by stream systems ... will be issued. It will give priority, purpose, period, place and quantity for each recorded right, with name and address of the owner."

The plat, shown in Figure 5, shows the clearness with which water rights can be recorded when water is made appurtenant to the place of use. It shows the character and extent of water rights as established for each forty-acre field.

Similar plats for each township in the State are kept in a loose-leaf book and indexed for quick reference. Upon these are compiled all information relating to water as it accumulates.

Lands not shaded must under present circumstances remain without water. Lands B, C, and D will not receive water unless contemplated works are constructed within the time allowed. Purchasers buy with knowledge of the fact presented to them.
Figure 3. Map of Location


*See Footnote No. 88 for explanation.*
O. W. Isrealson of the Irrigation and Drainage Department of the Utah State Agricultural College says: "If the public were represented in all proceedings for the purpose of defining vested water rights, and if the definition of rights were based on long time, painstaking, unbiased duty of water and other investigations, it is believed that permanency or period of endurance of each decree could be greatly increased and the ultimate cost of litigation thereby decreased and also that the interests of both the individual and the public would be thereby better protected."\(^{89/}\)

The information available on the costs connected with these rights did not furnish the basis for a rigorous analysis of the purpose of expenditures nor did it show how well this work was being carried on by the central agency. However, some cost information of a similar nature to that which would accompany the putting into effect of a like agency in Montana was received concerning the determination and certification of water rights. The data concerning costs of determining rights under a central agency were more complete from Oregon than from any other state. The first three years' work in gathering a complete and reliable record of old rights, involved 25 stream systems, 265,055 acres, and 2,000 claims for water. There were 965 separate rights fully determined on 15 of these streams at a cost of $8,111. These involved water for 89,034 acres. The Circuit Court confirmed the granting of 496 certificates on nine of the streams, covering 54,902 acres. One hundred and ten acres was the average size of tract covered by a certificate. The cost of a

\(^{89/}\) Isrealson, O. W., "Legislation Concerning Water Rights," Circular No. 39, Utah Agricultural Experiment Station, Dec., 1918.
certificate for that number of acres was $1.10. During a three-year period, 1,024 permits to appropriate water were approved from 2,084 applications, at a cost of $30,000. 90/

British Columbia spent approximately $500,000 for investigations to put 8,000 records on file in their central agency. 91/

Utah has had, except for a period when the authority for doing so was under dispute by the courts, a revolving fund of $15,000 out of which the expenses of determining water rights are paid and into which the fees collected for this service are put. 92/

The first 18 months of determining rights and issuing certificates in the state of Washington required the expenditure of an appropriated sum of $25,000. 93/

In Wyoming only a few streams were adjudicated each year and the costs were nominal. Appropriators now pay an initial fee of $2.00 ($1.00 for filing the appropriation and $1.00 toward the maintenance of the State Board of Control) and pay for the survey which is made by engineers of the State office. The cost of securing a defined right is considerably less in Wyoming than in Colorado, where rights are adjudicated as in Montana. 94/

91/ Letter of Dec. 2, 1941, from J. E. Lane, Deputy Comptroller, Department of Land, Water Rights Branch.
93/ Letter of Dec. 4, 1941, by Charles J. Bartholet, Supervisor of Hydraulics.
94/ T. C. Bishop, State Engineer of Wyoming, in a letter of Dec. 8, 1941, says, "I do not believe there is any manner by which you could eval-
In Idaho the cost of "collecting all records," according to E. V. Berg, Commissioner of Reclamation, "did not exceed $5,000."95/

An original expenditure of $4,000 established the Board of Irrigation in Nevada. This Board was made responsible for irrigation and hydrographic studies.96/

Charges made to water right owners for the surveys in several states either defray or help to defray all of the expenses. Both in Oregon and Utah charges are made for the services of the workers on their respective staffs. Oregon collected $41,382 for services which were made at a cost to the State of $30,000. Utah's upkeep of her revolving fund necessitates the collection of at least the same amount as expended.

94/ (continued) state the cost of our system in dollars and cents as compared with the cost in Montana. However, I will give you a concrete example of two rights from the Little Snake River, which would seem comparable, and for convenience we will designate them as "A" and "B". "A", located in Wyoming, hired a surveyor and had maps and applications prepared at a cost of $30 and filing fee of $2. He built the system to irrigate 480 acres and submitted proof of appropriation and paid the statutory fee of $2, a total cost to "A" of $34. "B", located in Colorado, just across the line, hired a surveyor, had maps and applications prepared at a cost of $30 and a filing fee of $10. He built the system to irrigate 480 acres. To prove his right, he was obliged to have a survey made to determine just what land had actually been irrigated, at a cost of $20. (In Wyoming, the Board of Control accepts the affidavit of the claimant on this.) He was obliged to employ an attorney to place the matter before the court, at a cost of $100 and to pay the surveyor $10 to testify as an expert witness. He also paid the advertising, amounting to $20 and three witnesses, at a cost of $12, a total cost to "B" of $132, or a difference of $158 or more than five times as much for the appropriator in Colorado, which state has a system similar to that in Montana.

"I have known cases in Colorado where an appropriator with a small area irrigated has refused to complete an adjudication after having completed the project, on the grounds that the cost would be more than the value of the irrigated land."

95/ Letter of December 8, 1941.

96/ State of Nevada, "Biennial Report of the State Engineer," for the period July 1, 1938, to June 30, 1940.
Recording Water Rights

The use of water is a vested right. It is a property right that can, under certain conditions, be bought, sold or transferred, and as such a certificate of it should be a matter of record. This record should be kept up to date and its entire history made available in one place in the State.97/

Certain procedures are unquestionably more efficient than others. "Long experience has shown definitely that centralized procedure is productive of better results than the old system of posting and filing notices...."98/ The state can hire experts to advise in carrying out the functions involved in handling complicated physical problems connected with water. The central office can inform individuals and agencies about water resources and their use.99/ Aside from this, the recorded water rights would be valuable for other purposes.

A compilation of all water rights in the basin (Yellowstone), listed in order of their seniority, would be very helpful in the drafting of an interstate compact.100/ "The possibility of establishing plans for future water use based on factual data is assisted materially

97/ Letter from E. V. Berg, Commissioner of Reclamation, State of Idaho, Dec. 8, 1941.


99/ From a letter of Feb. 16, 1942, by Wells A. Hutchins.

by an accurate and complete record of diversions from each and every source of supply together with other materials and aids available to a central agency.101/

Aside from the acquisition of new rights and the adjudication of old rights, recording is necessary to any organized system of administration. In some states, many other duties are performed by the central office. In Utah, for instance, some of these are: to inspect dams, aid federal courts, cooperate with other states, confer with county engineers, make recommendations to the Governor and cooperate in surveys with the federal government.102/ The central offices in the various states cooperate with the United States Geological Survey in measuring streams and carrying on snow survey work. The office of the State Engineer carries out this work in Montana at present. Under a central office it would be possible to have records of these various functions a part of a single system of records.

For instance, information from gauging stations on a stream could be incorporated. These records indicate the discharge of a stream for each day in the year and can be compared with storage and flowing rights by means of a chart. (See Figure 4.) Surplus water available for new appropriations is shown on this same chart. It is possible to build up summaries of this information in the form of tables which will show total figures for the different areas. (See Table II.)

101/ Letter of Dec. 8, 1941, from L. C. Bishop, Wyoming State Engineer.
102/ Ibid., pp. 1-81.
Figure 4. Typical Water Map

Source: "The Oregon System of Water Titles", Office of State Engineer,
Salem, Oregon, Bul. No. 2, April, 1912.
TABLE II.
PRELIMINARY SUMMARY OF PRESENT AND MAXIMUM WATER USE IN TREASURE COUNTY, 1940.

<table>
<thead>
<tr>
<th>Source of water</th>
<th>Present</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellowstone River</td>
<td>12,868</td>
<td>19,968</td>
</tr>
<tr>
<td>Big Horn River</td>
<td>1,659</td>
<td>1,689</td>
</tr>
<tr>
<td>Tullock Creek</td>
<td>2,181</td>
<td>2,181</td>
</tr>
<tr>
<td>Sarpy Creek</td>
<td>2,980</td>
<td>2,980</td>
</tr>
<tr>
<td>Other</td>
<td>1,668</td>
<td>1,668</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Canals</th>
<th>Present</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rancher</td>
<td>4,676</td>
<td>5,537</td>
</tr>
<tr>
<td>Yellowstone Irrigation District</td>
<td>5,526</td>
<td>7,514</td>
</tr>
<tr>
<td>Box Elder</td>
<td>1,119</td>
<td>1,470</td>
</tr>
<tr>
<td>North Sanders</td>
<td>0</td>
<td>5,658</td>
</tr>
<tr>
<td>Big Horn - Tullock</td>
<td>1,539</td>
<td>1,589</td>
</tr>
<tr>
<td>Hysham Cooperative</td>
<td>0</td>
<td>140</td>
</tr>
</tbody>
</table>

\* This Table is built up from individual schedules, which, in turn, are a compilation of all information available from all sources cooperating.

Source: Work Projects Administration (W. P. 5116), "Water Resources of Montana and Their Use."
Costs under the centralized procedure for this type of work are not excessive. During the 1939-1940 biennium, $84,000 was expended in Nebraska for administering rights, securing hydrographic data, and maintaining the records relative to water appropriations. 103/

The Board of Irrigation in Nevada now receives $1,500 per biennium. For the 1938-1940 biennium, the State Engineer's office in Nevada received $25,000 from the Legislature. 104/

The administration of the central agency during the 1936-1938 biennium cost $46,153 in Utah. 105/

The Division of Hydraulics and Water Resources spends, including other activities besides the appropriation of water, between $30,000 and $35,000 during each biennium in the State of Washington. 106/

Costs of maintaining the central agency in Oklahoma are very small. 107/

103/ Letter dated Dec. 5, 1941, by Dana S. Jones, Jr., Assistant Chief, Bureau of Irrigation, Water Power and Drainage.

104/ State of Nevada, "Biennial Report of the State Engineer," for the period July 1, 1938, to June 30, 1940, p. 156.


107/ From letter of Dec. 4, 1941, from Don McBride, Director, Divisions of Planning and Water Resources and Oklahoma Planning and Resources Board: "In this state the office of State Engineer has been buffeted around from the Highway Department to the Department of Agriculture, to the Planning and Resources Board and now is a part of the
Much of the expenditure by central agencies in other states is met by fees assessed to those benefiting directly from the rights. Applications for rights and their investigations in Nebraska returned $21,690 in fees during the 1939-1940 biennium.108/

Power license fees collected return sufficient money to cover these costs as well as the funds expended for cooperative work with the United States Geological Service in the State of Washington.109/

Fees returned $6,275 in Utah.110/

In British Columbia an annual revenue of $550,000 is received, 80 per cent of which comes from power companies.111/

107/ (continued) Oklahoma Planning and Resources Board, now called the Division of Water Resources. The actual cost of the keeping of the records in this state is practically nil and the department has been able to collect, so far, actual costs for making hydrographic surveys. The hydrographic surveys are made by the engineers that are kept on our force for other activities. Frankly, I believe it is possible to set up a State Engineer’s office to administer the water rights of the State and make such office entirely self-supporting, and I am sure the advantages are worth considering by any state legislature. For instance, in our state our office cooperates with the United States Geological Survey in stream gaging, with the Bureau of Reclamation in investigating projects, and we are the liaison agent for the Army Engineers on public hearings and with the Department of Agriculture.


109/ State of Washington, op. cit., p. 27.

110/ State of Utah, op. cit., p. 207.

111/ Letter of Dec. 2, 1941, from J. E. Lane, Deputy Comptroller, Department of Land, Water Rights Branch.
Changing Social Trends

Society is interested in those people who benefit from the use of water. Private ownership of water rights allows personal profit. Personal profit has been conducive of allowing the principle, prevalent during most of the history of the United States, of exploitation to be practiced by individuals, whether or not such practice is beneficial to society. As against this, water rights in the hands of the State or Nation might allow water to be distributed so that use could be made of it on the basis of greatest social benefit. Water rights are acquired under laws set up by the state, but the principle of beneficial use has not played as prominent a part in deciding the uses to be made of water as is likely in the future. To divide the supply of water on the basis of beneficial use may mean that returns will not accrue to the same individuals as under private use. This might mean the taking away of the right to the use of water from those whose use made the least return to society.

Water right in its simplest form is the putting of water to use. Law is the basis of the perpetuation of water rights and of water right records. Under law a water right is what the State makes it.

112/ By their ratification of State constitutions the Congress of the United States granted to those states that had placed within their constitution a section taking it for granted, the right of control over the water within their boundaries. Article III, Sec. 15 of the Montana Constitution says, "The use of all water ... shall be held to be a public use," thus law concerning water, if, quoting State et. al. v. Atchison et. al. 96 M 335, "the public welfare requires its exercise, rests entirely with the legislature," and, quoting Spratt v. Helena Power Transmission Co., 37 M 60, "The language of this section, in the light of our history and natural conditions, in a region where the conservation and use of its water is all-important to its development and progress, is a mandate from the sovereign people to the courts."

Authority over water, especially in the interest of navigation, is being disputed between the United States and the individual states. But until this question is more fully settled, the authority for the states retaining control is seemingly implicit in several United States Supreme Court decisions. States have the right of jurisdiction in the matter of water, over the beds of streams, and the right of determining which of the doctrines, appropriation or riparian, they wish to adopt. The Supreme Court has sent back to the individual states the cases concerned with determining rights on interstate streams as a matter to be settled between the states and has indicated that it prefers not to pass on questions of interstate water use. Montana, under the present system, has no means of expressing an opinion as to the amount of water awarded by or used under existing rights.

Water rights protect existing uses of water, guide settlers or purchasers of lands and protect those persons proposing to build new ditches or reclaim additional land. Previously, protection of existing rights has been an intra-state matter, but where a stream crosses a state line, it now also becomes an interstate matter as well.

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114/ Stone, Clifford A., "Adjusting Water Rights Between States," mimeographed report of address made before the Western State Engineer's Association, Great Falls, Sept. 25, 1940.

In Montana rivers rise which drain a large part of Western United States. These rivers flow into three distinct regions. Montana's policies are thus affected by the policies having to do with three regional areas. Two of these areas, only, are in the United States, those of the Columbia and Missouri Rivers, while that of the St. Mary River is in Canada. Montana is in the process of working out a compact with the states of Wyoming and North Dakota on the Yellowstone River.

In the Pacific Northwest, Region No. 9, the Columbia River is the unifying influence which must be stressed. On its present and potential water supply depends the future agricultural, industrial, and population growth of the Pacific Northwest. One of the most important problems confronting all but a very limited part of the region is its effective use and management of this water supply. "The greatest single unifying factor, the most potent element in the past, present, and future development of the Northwest is the Columbia River.... Measures designed to control run-off are of paramount importance. Storage facilities to regulate stream flow, conserve flood waters, and prevent floods, the protection or replanting of denuded watersheds, and the development of sound land use practices, are essential to the conservation of water.... Considerable research is needed to determine more exactly the water requirement of various types of land and crops in order to make the most effective use of available as well as potential supplies." This statement is made in "Pacific Northwest Resources in Outline," prepared and published by the Northwest Regional Council, Portland, Oregon, May, 1940.
The Missouri River is the common bond for Region No. 6, the western half of which comprises that area known as the Great Plains. In this area "we find one of the major rural problem areas of the United States... the problem becomes one of intense water conservation." Taken from "Preliminary Statement, Regional Development Plan, Missouri Valley," Region 6, Omaha, Nebraska, 1940.

Interstate action is a matter to be settled by compact. Compacts are reached between commissions whose members are appointed by the governors of the respective states as representatives of its citizens. Compacts are basic agreements by which to guide future action between those states.

The apportioning of the water supply is dependent on water rights.116/ Water rights in Montana, as in other states of the semi-arid west, are under the appropriation rather than the riparian doctrine of water use and these rights protect the persons putting the water to use. The basis upon which water rights may be acquired are: (1) appropriation, (2) priority, which means that the use first in time is the first in right, and (3) beneficial use. These principles demand verification for their determination, the former by verbal or written evidence, and the latter by hydrographic survey. County records are not adequate and county offices do not have time nor are they competent to handle water disputes. Stream systems do not terminate within county boundaries, and accurate accounts and studies cannot be made without inter-county coordination.117/

116/ Letter from Ed. H. Watson, State Engineer of Utah, as of November 28, 1941.

117/ Letter from Don McBride, Director, Divisions of Planning and Water Resources, Oklahoma Planning and Resources Board, dated Dec. 4, 1941.
Without this information it is practically impossible to plan intelligently for future development and to make equitable adjustment of existing rights.\footnote{118} In Montana, individuals pay all expenses involved in administering their own water rights. State and Federal agencies have entered the construction field and built projects both by direct grant and by loan. Where projects can be built for multiple uses, the individuals sharing in the returns from all these uses should help finance both the building and the maintenance of the project.\footnote{119}

Ideals leading to exploitation have given way to those leading to the conservation of resources for long continued use. Planning for the latter ideal is not instituted on a national scale. Measurement of returns under this type of planning is on the basis of social welfare.\footnote{120}

\footnote{118} See article by H. E. Murdock in the records of the First and Second Annual Meeting of the Montana Irrigation and Drainage Institute, pp. 10-12.


\footnote{120} The Water Resources Committee on the National Resources Planning Board is charged with the responsibility of being a clearing house for plans and projects, each of which will contain the following characteristics: (1) it will be concerned not with water by and for itself, but with the promotion of public safety, public health, the public convenience and comfort, the economic welfare of the public, the establishment or maintenance of a high standard of living, (2) it will need to promote the maximum integrated control and use of water within the changing limits of technical feasibility and of economic and social justification, (3) it normally will treat drainage areas as units, (4) it will observe the rights of the states both in intra-state streams, (5) it will hold facts to be indispensable prerequisites to sound action, (6) it will assign the cost of constructing and operating projects among the agencies concerned in general accordance with the distribution of benefits and (7) in determining whether or not projects are justifiable, and in distributing the costs of projects among the beneficiaries, it will take
Future development of irrigation, it is said by George S. Knapp, Chief Engineer of the water resources of Kansas, will be mainly a public concern, and cooperation with federal and other state agencies in studies that are being made is a function of the central office that will increase in importance. The needs of peoples in the semi-arid regions are being met, in part, by federal expenditures. According to the "Preliminary Report on Development of Economic Opportunities in Montana," heavy expenditures have been made in Montana in the past few years for water conservation and use projects. According to Judge Stone, among others, for states to assume their responsibilities in regard to water will help to keep control in their hands. One of the more important responsibilities of the State is that of entering into inter-state compacts so that national, orderly and full economic development of streams may be achieved. This is a function, according to the "Preliminary Report on Yellowstone River Basin," which lends itself well to planning.

120/ (continued) account of social, economic, general, special, potential, and existing benefits.

"In addition to those considerations, policies for drainage basin development must be related from an over-all national development...." Taken from "Drainage Basin Problems and Programs," 1937 revision, National Resources Committee, March, 1938.


This study assumes that planning will become a permanent program, and that its goal is eventually to put water to the highest possible use.\footnote{The uses allowing the greatest return by whatever standard are eventually set up by society.}

Dean Loucks, State Engineer of South Dakota, in a letter of November 28, 1941, says: "It is not possible for me to state in a definite figure the value of recorded water rights, but it is my conviction that if such a figure were available, it would be many times more than the cost of keeping such a record. This would be still more true of a state that is located entirely within the arid region than of one which is partly in the semi-arid zone."

The people in control of the administration of the waters of the other semi-arid states do not favor the present method of handling water rights in Montana. Heads of the central agencies in other states, however, do not express entire satisfaction with their own. They recognize the need of changes and realize the necessity of meeting new problems as they arise but feel that central offices are an improvement over other methods of administration.\footnote{National Resources Planning Board, "Symposium on State Water Law of the Pacific Northwest," March 11, 1940.}

Changing Montana's Method of Water Rights Administration

Data presented so far in this thesis show that parts of Montana water law have been changed considerably.\footnote{For example, "Revised Codes of Montana," 1935, Section 7095, as shown in its history, appeared in 1886 was amended in 1895, 1901, 1921, and again in 1935.}
Engineer was created in 1903. This office has been the nucleus for the organization of the central agency in most states. Montana has also established the State Water Conservation Board, whose main purpose, however, as stated in the law, was to relieve unemployment. However, it did, at the same time, allow the carrying on, through the State Engineer, of some functions which alleviated the expression of need for basic changes in law.

The State Legislature has recently provided a means whereby, at the request of the State Water Conservation Board, the State Engineer may bring action to adjudicate the waters of any state stream and its tributaries. This, in most states, is one of the first duties laid at the door of the central agency.

These changes have provided, in Montana, some of the functions generally associated with a central office in other states and might be taken as the precedents for more change, although it is much easier to choose a basis for water rights early before many are put into effect, than it is to change the basis later. The fact that so many changes have been made in Montana gives indication that changes are and will be made if sufficient cause is shown.

At the present time Montana's laws are changed by the State Legislature as a result of a need expressed either by individuals or groups.

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129/ See "Revised Codes of Montana, 1939," Secs. 349.66-349.75.
to members of that body. This need may or may not be one of genuine merit. Very few of the legislators that are called upon to pass on such measures are qualified to judge whether or not the measure is meritorious. The present system allows development to continue to take place in the same manner as at present. Exclusive adherence to statutory procedure, which "appears to be the more efficient system" is not demanded.  

The State, though the agency purported to have control of all public waters, must pass laws thought by its administrative officials to be in line with the furtherance of its duties, in the same manner and through the same channels as individuals.

SUMMARY AND CONCLUSIONS

1. The establishment of water rights by court procedure has in recent cases, in Montana, cost individuals from $1.25 to $3.77 per miner’s inch but in some cases no satisfactory evidence of ownership has been given such as would have been possible under a central agency.

2. Necessary information on water rights in Montana has been gathered by various agencies at considerable cost. Under a centralized system of control and administration, this information could be more easily gathered and made more easily accessible to individuals.

3. The cost of a central agency as shown in this study would not be greatly different from that under the present system and through a rate system such an agency might be largely self-supporting.

4. A centralized system of control and administration would permit the use of personnel trained especially to work with the problems of irrigation.

5. Numerous changes in law have been made, some of which make actions possible in Montana that are a part of a centralized system in other states. To establish a central office in Montana, therefore, would require only additional changes rather than a completely revised system.
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