# CONGRESS AND THE NEWLANDS ACT

bv

# SHIRLEY BARCLAY NEAL

B. S., Kansas State College of Agriculture and Applied Science, 1947

A THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of History, Government, and Philosophy

KANSAS STATE COLLEGE
OF AGRICULTURE AND APPLIED SCIENCE



LD 2668 T4 1955 N34 c.2 Document

# TABLE OF CONTENTS

PREFACE	11
INTRODUCTION	:
MOVEMENT FOR FEDERAL PARTICIPATION	1
CONGRESSIONAL ACTION AFTER 1900	1'
SIGNIFICANCE OF THE NEWLANDS ACT	4
CONCLUSION	4
ACKNOWLEDGMENTS	4
BTBLTOGRAPHY	4

## PREFACE

The purpose of this study was to understand the arguments, both pro and con, for the Reclamation Act or Newlands Act of 1902. Since such a vast portion of the United States was included in the legislation, this detailed study gave a better insight into the total history of that period. The writer's interest was principally in western history, and knowledge of the irrigation and consequent development of that area seemed advantageous.

Most valuable sources were the discussions of the measure in the <u>Gongressional Record</u> and the numerous writings of F. H.

Newell. Newell was an able engineer who worked for many years with the Geological Survey, became the first Chief Engineer, and, later, Director of the Reclamation Service. Although sufficient sources were available, it would have been helpful to have had access to Congressional Hearings on the bill and to current newspapers of that period. Weekly papers such as the <u>Nation</u> and <u>Public Opinion</u> devoted very little space to the matter. Cuban reciprocity, the Philippine question, and the Isthmian Canal were the burning issues of the day and crowded out domestic issues. Brief mention was made of the fact that the irrigation legislation had finally been successful in Congress.

#### INTRODUCTION

Legislation of such significance as the Newlands Act is worthy of study. The Newlands Act or Reclamation Law of 1902 was the culmination of many years of experiments, investigations, and previous attempts at legislation which were designed to solve the problem of bringing water to the arid regions of the United States. This law directly affected nearly one-half of the area of the United States, and the advocates of the measure staunchly proclaimed that it would exert a favorable influence on the welfare and prosperity of the whole nation.

In this study an attempt will be made to analyze the movement for federal participation in reclamation, the controversial issues, and the motivating forces which led to the passage of the Act in Congress.

The Encyclopaedia of the Social Sciences defines reclamation as "consisting of the operations and process of bringing to a high grade of usefulness in crop production lands which at the inception of the undertaking are either in an unproductive state or are of inferior or limited capacity to produce." In the United States this definition is limited in general usage to reclamation of arid lands in the western states for purposes of agriculture.

The Reclamation Act appropriated the receipts from the sale and disposal of public lands in certain states and territories

<sup>1</sup> The Encyclopaedia of the Social Sciences (New York, 1948), p. 161.

to the construction of irrigation works for arid lands. Location of these arid regions is one of the primary concerns in an investigation of reclamation. There is no distinct division or boundary between the arid and humid areas. Near the center of the United States there is a broad belt which is termed semi-arid or sub-humid. This belt extends over North Dakota, South Dakota, western Nebraska, and western Kansas into Oklahoma and the panhandle of Texas. To the west of this belt lay the arid regions. Major John Wesley Powell defined the arid region as beginning midway in the Great Plains, extending westward to the Rocky Mountains, and to the Pacific Ocean. On the northwest coast, including Washington, Oregon, and the northwest corner of California, there is a region of greater precipitation.

The distinguishing characteristic of this region is aridity or unequal distribution of moisture. The arid West is usually defined as the land with less than 20 inches of rainfall annually, and this area falls west of the hundredth meridian. The sub-humid region or eastern Great Plains has approximately 28 inches of rainfall annually. Successful agriculture in such regions is forced to depend upon irrigation. There are advantages to such a climate, however, as extremes of temperature are not so disagreeable without humidity.

Without irrigation this vast portion of the United States

<sup>1</sup> F. H. Newell, "First Annual Report of the Reclamation Service," House of Representatives Document No. 79, 57th cong., 2 sess., p. 19.

<sup>2</sup> John Wesley Powell, Report on the Arid Region of the United States (Washington, 1879), p. 1.

had little value. Possibilities for agricultural development were encouraging as the soil was not lacking in fertility. There was a tendency among early western promoters to exaggerate the resources of the West for intensive farming and support of a large percentage of the nation's population. An extreme reaction against the great American Desert myth developed. The land which had once been scorned as useless was now proclaimed as the future farm for America's downtrodden—the economic salvation of the common man. William E. Smythe wrote that:

The valuable ingredients of the soil which are soluable have been washed out of the land in humid regions, like our eastern states, by the rains of centuries. On the other hand, these elements have been accumulating in the arid soil of the West during the same centuries. They lie there now like an inexhaustible bank account on which the plant-life of the future may draw at will without danger of protest. The process which created this rich soil goes on repeating itself.

It remained for John Wesley Powell to bring a more realistic note onto the scene. With his scientific ability he was able to reach a more accurate evaluation of the importance of the West in relation to the nation's development.

Powell emphasized the fact that it was possible to irrigate only a small percentage of the arid region. Limiting factors were the amount of water available for irrigation and topography of the land. Much fertile land could not be irrigated because the surface was too broken for the distribution of water.

The land could be grouped in three classifications: irrigable lands, timber lands, and pasturage lands. The timber lands

<sup>1</sup> William E. Smythe, Gonquest of Arid America (New York, 1900), p. 58.

are on the elevated plateaus and mountains. In the last quarter of the nineteenth century they constituted from 20 to 25 per cent of the arid region. 1 Between low irrigable lands and the elevated forest lands there are valleys, mesas, hills, and mountain slopes which were useful as grazing areas. Pasturage lands have value only when the lands are owned in large quantities. They are not suitable for agricultural purposes.

A long history of irrigation in this area gave evidence to its practicality. The prehistoric Indians had left many traces of irrigation practices in the lands of the Gila, Rio Grande, and San Luis drainage areas in Arizona. New Mexico, and Colorado. The Canal Builders of Southern Arizona, whose culture reached its peak about 1400 A. D., were especially notable, and some of these old canals are still used in the Salt River Valley irrigation serving the central Arizona area around Phoenix.

The earliest documentary evidence of irrigation may be found in the writings of Coronado and his party. Descriptions were given of Indian tribes that worshipped the water and springs. built irrigation canals, and were quite successful in their agricultural ventures.2 At the close of the sixteenth century, the Spaniards began to exert influence. Cultivation of soil by artificial application of water seemed very natural to the Spaniards as they used such practices in their native land. As colonization of southwestern America began and missions were established.

<sup>1</sup> Powell, op. cit., p. 23.
2 R. H. Hess, "Beginnings of Irrigation in the United States,"

Journal of Political Economy, October, 1912, 20:807.

irrigation was increased. These attempts were not recognized as the beginning of the irrigation economy of the West.

Modern American irrigation is said to have begun with the Mormons in 1847. The success of their venture in Utah is remarkable because of their lack of experience and poor engineering. In 1848 they had 5,000 acres of irrigated land in cultivation. By 1890, the area had increased to 263,500 acres. The Mormons did much to aid the development of western irrigation. They made contributions by improving systems through trial and error, and their laws concerning water rights have been a guide to other weatern states.

Another unique experiment in western agriculture was the Union Colony at Greeley, Colorado. This colony was founded on cooperative ideals and respect for law and order, under the leadership of Horace Greeley in 1870. The Mormons and Union Colony showed that irrigation with cooperative labor could be profitable, and they did much to establish a basis for effective aridland exriculture.

In 1871, Riverside Colony, a cooperative undertaking, was started on the Santa Ana River in southern California. To insure financial success the colony changed to a system of private enterprise that sold land and water. This permanent settlement became the pioneer orange colony of California.<sup>2</sup>

Primitive mining methods resulted in the beginning of many

2 Ibid., p. 10.

<sup>1</sup> Alfred R. Golze, Reclamation in the United States (New York, 1952), p. 6.

private developments. Original miners' canals were in many instances converted to irrigation agriculture. There was a ready market for any produce in the nearby mining settlements, and many would-be miners turned to farming. Though water was increasingly applied to arable lands, the early settlers did not realize the importance of streams and the significance of water rights.

Agriculture was dependent upon irrigation within the arid region. Deficient rainfall and extreme evaporation necessitated the application of water to crops. Under this system, water was applied at the moment when it was most beneficial to crops. In the humid regions, time and amount of application were left to chance and thus irrigated crops had an advantage. The source of water supply was from the mountains and plateaus. By the time it reached the irrigable lowlands the water was enriched by fertilizing materials derived from decaying vegetation. With irrigation, many of the elements of chance were removed from agriculture and there was more assurance of success in a farming operation.

Several factors were necessary for successful irrigation.

Of paramount importance was a sufficient supply of water. This
was a definite limiting factor in the amount of western lands
which could be considered arable. Another thing to be considered
was the topography of lands. Land had to be situated so that the
distribution of water upon it was physically possible, and the
altitude could not be so high as to retard the growth of agricultural products.

Individualism had to be put aside when dealing successfully

with irrigation problems. Cooperative action or a large amount of capital was necessary to finance a project. Lack of irrigation law proved a major problem.

The importance of the streams was not generally recognized by the early settlers. Different and conflicting theories involving water rights developed, and confusion and dispute was the result. In the absence of legal controls, the common-law doctrine of riparian right, or the right of the landowner to use the water flowing past or through his property, was adopted. A strict interpretation of the riparian doctrine limited the amount taken from streams to that which could be returned undiminished in volume. This doctrine had its origin in English common law and, while satisfactory in a humid country, was not easily adaptable in arid regions where irrigation was commonly practiced.

The more widely accepted doctrine was that of appropriation. Basically this meant that the first to use the water had the first right. With increased western immigration and agricultural development, diversions from streams increased until there was an insufficient water supply for the needs of all the crops. At this point the doctrine of priority developed. A user could apply for a legal right to use a certain amount of water from a specified source and was required to put it to beneficial use. The legal priority thus gained by the irrigator was not easily enforceable. If another user subsequently diverted water, slow and expensive civil action in the courts offered the only relief.

<sup>1</sup> Elwood Mead, <u>Irrigation Institutions</u> (New York, 1910), p. 62.

Western development was rapid after communication lines became established. Search for mineral wealth provided the first impetus. Pasturage lands were utilized by stockmen as grazing ranges. Settlers recognized the necessity and, before long, the possibility of development by irrigation. As western expansion and agricultural development continued, the need for more coherent legislation and control over the use of water became apparent. There was a slowly growing demand for federal participation in reclamation.

# MOVEMENT FOR FEDERAL PARTICIPATION

Major John Wesley Powell was the key figure in drawing the attention of Congress toward the arid regions. The Report on the Lands of the Arid Region of the United States clearly pointed out the need for social institutions adapted to the conditions of nature found in the West. He emphasized the importance of the cycle of the flow of rivers and the fact that the major development of irrigation depended upon the use of the large streams. Necessity for reserving sites for reservoirs was also stressed.

Knowledge of the arid public land was obtained by examination of arid public land under the sponsorship of the Smithsonian Institution. Later this work was continued by the United States Geographical and Geological Survey of the Rocky Mountain Region, which was a bureau under the Department of Interior. 1

<sup>1</sup> F. H. Newell, First Annual Report of the Reclamation Service, p. 34.

Major Powell's report was printed as a House Document in 1878. According to Wallace Stegner, Powell's report:

....was a complete revolution in the system of land surveys, land policy, land tenure, and farming methods in the West, and a denial of almost every cherished fantasy and myth associated with the Westward migration and the American dream of the Garden of the World. Powell was not only challenging political forces who used popular myths for a screen, he was challenging the myths themselves, and they were as rooted as the beliefs of religion.

A direct result of Powell's work was the establishment of the Geological Survey by the Act of Congress of March 3, 1879. The topographic-survey program provided much useful information for the classification of public lands.

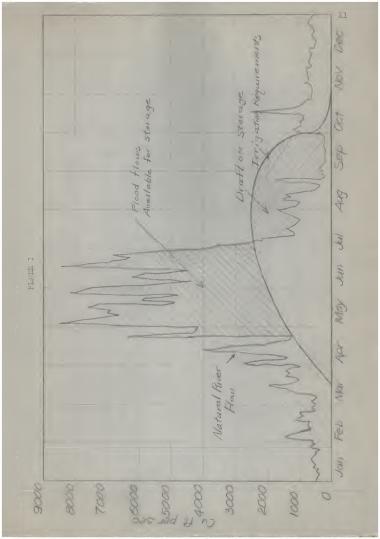
An understanding of the cycle of the flow of rivers also brought about the recognition of the need for Federal participation. Reservoirs must be built to capture and store the flood flows as there was not sufficient volume in the rivers by natural flow to irrigate crops in the months they needed water. Plate I shows how the natural river flow varies. During May and June, irrigation requirements are greatly exceeded, but in July, August, and September there is need for more water.

Although Powell continually stressed the fact that only a small percentage of the arid lands was irrigable, this view was not accepted by many of those interested in western development. One of the most influential of these optimistic promoters was William E. Smythe. He organized the first national Irrigation Congress, which met in Salt Lake City in 1891. This group of

<sup>1</sup> Wallace Stegner, Beyond the Hundredth Meridian (Boston, 1954), p. 212.

# EXPLANATION OF PLATE I

ern stream. Adapted from Golze, Reclamation in America, Hydrograph showing amount of flow in typical westp. 20.



people was determined to support a program which would aid reclamation and irrigation. Smythe did much to publicize the movement. In addition to founding and editing <u>Irrigation Age</u>, he wrote for other periodicals and eventually described his views in The Conquest of Arid America:

population and super-abundant capital which have accumulated in the old States, and the surplus resources of lands, forests, minerals, and waterpower lying unused in the West. We shall consider how surplus men and money be brought to surplus resources, and applied, under sound business principles, to the making of homes, industries, and institutions in consonance with the traditions of our race and the genius of the people.1

From this beginning at Salt Lake City there originated a series of National Irrigation Congresses. The organization supported a program of national irrigation and reclamation of the arid public domain. It declared that all streams rising in one state and flowing through one or more other states must be controlled and fairly divided under federal authority. By 1896, the fifth Congress, which met at Phoenix, Arizona, urged the construction of storage reservoirs by the Federal Government to furnish water for reclamation and actual settlement of the public lands.<sup>2</sup>

These conventions met annually with meeting places throughout the western states. In 1899, an association was formed in order to continually keep the program before the public and to influence public sentiment for national participation in reclamation. George H. Maxwell of San Francisco was named chairman of

<sup>1</sup>Smythe, op. cit., p. XV.

<sup>2</sup> Newell, op. cit., p. 39.

the executive committee. Stress was laid on the development of the western country so that it would provide a home market for eastern shops and materials.

Another man who did much to gain popular support for the movement was Frederick H. Newell. He received an appointment as assistant hydraulic engineer under Major Powell in 1888, and for nearly 14 years worked on irrigation surveys as a hydrographer in charge of stream measurements. Because of his pleasing personality and versatility as a speaker and writer, he was able to convince many people of the advantages of a national program of irrigation.

Newell listed the impelling motives for government participation as the building up of the national position in agricultural production, provision of land for an increasing population, and assistance to private landowners or cultivators to carry out needed improvements. He also felt that the government should break up large landed estates in the interest of closer settlement, and that it was possible to open up unused public lands for settlement.

Private individuals, corporations, and states lacked the capital necessary for the utilization of large streams. Only the national government had the resources to develop the huge reservoirs and projects which were a requisite of continued development of the West. It was also pointed out that rarely would a

<sup>1</sup> F. H. Newell, "The Work of the Reclamation Service," Annual Report of the Board of Regents of the Smithsonian Institution for the Year Ending June 30, 1804, p. 182.

company or individual build a reservoir which would develop a site to its fullest capacity. Continued loss on investments and lack of immediate profits also discouraged private investments.

Varied arguments were advanced to secure national assistance. The land area involved was vast. Approximately one-third of the United States was vacant public domain in 1900. Much of this land was fertile, and, with irrigation, was capable of supporting a large population. The many resources of the western states were dependent upon water conservation and the development of irrigation. Irrigation would make possible the cultivation of more land and would lead to greater mineral production. Increased industrial possibilities and the supply of cheap water power was stressed. The essence of the arguments was that reclamation would enable the West to fully develop its resources, and the result would be increased economic prosperity for the whole nation.

Many of the early opponents of federal reclamation projects felt that these matters should be controlled by the states. The basis for their arguments was the Constitution in a negative sense. The Tenth Amendment of the Constitution provided that powers not delegated to the Federal Government were reserved to the states. Since the Constitution did not specifically mention acquisition and control of water rights, it was maintained that the individual states had the right to control distribution and

<sup>1</sup> H. M. Chittenden, "Government Construction of Reservoirs,"
North American Review, February, 1902, 174:250.

use of water.1

Many controversies over irrigation policy arcse from economic conflicts. Because of such varying physical conditions there were many different community interests. Farming and grazing interests came into conflict because of changing and overlapping boundaries of the ranges and fields. Rights to water were also disputed. Many stockmen did not have legal title to the lands they were using and, as farmers settled in the region, the stockmen were naturally hostile toward them. Lack of cooperation between the various interests retarded enactment of progressive water laws.<sup>2</sup>

Public lands had been rapidly taken up by speculators. In 1878, the methods by which arid lands could be obtained were by taking advantage of the preemption, homestead, timber culture, and desert land privileges. The desert-land and homestead acts were misused as a means for securing titles to lands which were not brought under cultivation.

Much of the early legislation which made the Reclamation Act possible pertained to the land. The national government originally encouraged the individual states to participate in reclamation projects. As early as 1866, by an Act of Congress, the Federal Government surrendered any control over the use of the waters of non-navigable streams of the 17 western states for irri-

<sup>1</sup> Golze, op. cit., p. 93.

<sup>2</sup> Hess, op. cit., 20:825.

<sup>3</sup> Powell, op. cit., p. 27.

gation. 1 It provided that all irrigation must be carried on under state laws.

The Desert Land Act of March 3, 1877, provided that title to 640 acres of land could be acquired by reclaiming a portion of that land with irrigation within three years from the time of filing. Cost was \$1.25 per acre, and at least 80 acres had to be actually reclaimed. In 1890, Congress reduced the amount of land that could be obtained under the Desert Land Act to 320 acres.<sup>2</sup>

The Carey Act of 1894 was designed to help the public-land states reclaim desert lands. Each state could be granted desert lands in an amount not exceeding a million acres, provided that the state aided in the irrigation of those lands. Twenty acres out of each 160 acres must be in cultivation by settlers within ten years after passage of the Act. The Carey Act was not too successful because the applicants were discouraged by increasing high cost of reclamation.

In addition to these land measures, an attempt was made to gather scientific data which would be helpful in reclamation projects. In 1888, a resolution was passed which recognized that the regular flow of most of the western rivers was at this time fully appropriated. The Geological Survey was to make an examination of the western states and to determine possible storage sites for water. Appropriations were made by Congress for this

<sup>1</sup> Golze, op. cit., p. 16.

<sup>2</sup> Loc. cit.

purpose.

### CONGRESSIONAL ACTION AFTER 1900

After 1900, irrigation had demanded the attention of Congress. Movement toward the West Coast had awakened interest in the undeveloped region. Homeseekers found that the remaining public domain was in the arid part of the United States, so they strongly supported national aid. Congress had had numerous discussions concerning irrigation.

By 1900, public sentiment had become so favorable to national participation that the major political parties showed support of such measures in their platforms. This was important as it indicated such measures were receiving eastern attention, and it was necessary that reclamation be understood by the easterners in order for the matter to receive intelligent consideration from Congress. The planks which showed support are listed by Newell as:

Republican: In further pursuance of the constant policy of the Republican Party to provide free homes on the public domain, we recommend adequate national legislation to reclaim the arid lands of the United States, reserving control of the distribution of water for irrigation to the respective States and Territories.

<u>Democratic</u>: We favor an intelligent system of improving the arid lands of the West, storing the waters for the purposes of irrigation, and the holding of such lands for actual settlers.

Silver Republican: We believe the National Gov-

<sup>1</sup> Newell, op. cit., pp. 40-41.

ernment should lend every aid, encouragement, and assistance toward the reclamation of the arid lands of the United States, and to that end we are in favor of a comprehensive survey thereof, and an immediate ascertainment of the water supply available for such reclamation, and we believe it to be the duty of the general government to provide for the construction of storage reservoirs and irrigation works, so that the water supply of the arid region may be utilized to the greatest possible extent in the interests of the people while preserving all rights of the State.

In spite of strong popular support, party leaders and President McKinley were not enthusiastic about securing national reclamation legislation. It was one of those curious happenings of fate that made a successful bill possible. With the assassination of President McKinley, Theodore Roosevelt ascended to the presidency. Theodore Roosevelt had a vigorous personality, and he was an ardent supporter of the West. William E. Smythe gives Roosevelt much credit for constructive statesmanship and ability to see the economic possibilities in the arid lands. Smythe wrote that:

To save this wealth for the people to whom it now belongs, to direct its use to the creation of important public improvements, to lay the foundation of millions of homes on the basis of economic freedom and social equality—this is the peerless opportunity of the President of the United States who, in his heart of hearts, feels that he "belongs west of the Missouri River"...In these western deserts the seeds of the future lie dormant, awaiting the creative touch of the statesman. To kindle them into life and to make them bloom in deathless beauty for the republic and the world is the peculiar opportunity of President Roosevelt's administration.!

Serious congressional consideration was given to a bill providing for the reclamation of arid lands in 1901 before Roosevelt

<sup>1</sup> William E. Smythe, "Irrigation in the West," Review of Reviews, January, 1902, 25:76.

became president. The hearings relating to this bill disclosed a strong minority. Minority reports described the proposed law as class legislation which would use money belonging to the whole population. Injury to farming throughout the United States was feared. Taxing the farmers of the other areas to create competition against themselves could not be justified. The minority was in favor of giving public lands to the states and letting them proceed with reclamation. It ignored the failure of the Carey Act, which was intended to encourage state aid and which had not produced any noticeable increase of irrigated lands in the West. This strong minority and an indifferent administration resulted in the defeat of the bill.

Roosevelt lost little time in showing his support of a federal program of reclamation. Soon after arriving in Washington as president, he called a conference of congressional leaders to discuss the related matters of reclamation of arid lands and conservation of the nation's forests. Senators from 13 states and three territories of the arid and semi-arid regions were included in the conference. The conference appointed a committee of 17 to frame and present for consideration an irrigation measure. To insure non-partisan support, the committee consisted of both major political parties. After about a month, a satisfactory bill was drawn up. At a general meeting of the conference it was decided that Senator Henry C. Hansbrough, North Dakota, a Republican, should introduce it in the Senate, and Fran-

<sup>1</sup> Golze, op. cit., p. 25.

ces Newlands, a Democrat from Nevada, should introduce the bill in the House of Representatives. 1

A strong emphasis on reclamation and conservation was contained in Theodore Roosevelt's first message to Congress on December 3, 1901. Parts of this message were often quoted in debates in Congress on the reclamation bill. Roosevelt emphasized that the object of governmental participation in reclamation was the creation of homes for actual settlers. The arid publicands then available could be made suitable for agriculture only by the creation of irrigation works. Roosevelt said:

The reclamation and settlement of the arid lands will enrich every portion of our country, just as the settlement of the Ohio and Mississippi Valleys brought prosperity to the Atlantic states. The increased demand for manufactured articles will stimulate industrial production, while wider home markets and the trade of Asia will consume the larger food supplies and effectually prevent western competition with eastern agriculture. Indeed, the products of irrigation will be consumed chiefly in upbuilding local centers of mining and other industries, which would otherwise not come into existence at all. Our people as a whole will profit, for successful homemaking is but another name for the upbuilding of the Nation.

After this strong presidential support, numerous organizations in the United States endorsed national irrigation measures.

Most of the leading newspapers showed support of the ideas embodied in Roosevelt's message to Congress.

The bill was introduced in the Senate by Senator Hansbrough.

As direct appropriations and federal control of water rights had

<sup>1</sup> Congressional Record, 57th cong., 1st sess., p. 6674.

<sup>2</sup> Ibid., p. 861.

<sup>3</sup> John T. Gance, "The Origin of a National Reclamation Policy," Mississippi Valley Historical Review, June, 1931, 18:48.

met with the strongest opposition, they were omitted from the bill. The proposed legislation was rather general, and included the following provisions:

Section 1 of the bill proposed that the proceeds from the sales of public lands in Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Washington, and Wyoming should be set aside as a special reclamation fund. The amount earned by registers and receivers of land offices and the five per cent due to the states was to be subtracted first. The money set aside in this reclamation fund in the Treasury was to be used in the examination, survey, construction, and maintenance of irrigation works. The unreserved mublic lands in the states and territories named would become the basis of the fund, according to the terms of the bill. This land amounted to approximately 535,000,000 acres. It was estimated that the immediate annual income under the provisions of the bill would be from \$2,500,000 to \$3,000.000. Section 2 of the bill provided for surveys and examinations of proposed works which were to be reported to Congress. Section 3 provided for withdrawal from public entry of the lands required for any of the irrigation works. Lands to be irrigated were withdrawn except from homestead entry. Section 4 concerned the construction of the works and the apportionment of the cost of construction among the users of water upon the lands to be irrigated. Section 5 required the entryman to irrigate his land, and defined the terms and conditions under which land in private ownership might be irrigated. Conditions of payments imposed on the

settler on public lands and the water user on private lands were discussed. Section 6 provided for the form of local control and care of works by the settlers common in the irrigated country. In Section 7, means for acquiring lands and water rights were enumerated. Section 8 followed the well-established precedent in national legislation of recognizing local and state laws relative to the appropriation and distribution of water, and instructed the Secretary of the Interior in carrying out the provisions of the act to conform to these laws. This section also clearly recognized the rule of prior appropriation which prevailed in the arid region, and specified the character of the water right which is provided for under the provisions of the act. A policy of systematic and harmonious development of the irrigation possibilities of the arid region was declared in Section 9.

After the bill was introduced in the Senate by Senator Hansbrough, it was referred to the committee on arid lands and was reported favorably. The bill was titled "Appropriating the receipts from the sale and disposal of public lands in certain States and Territories to the construction of irrigation works for the reclamation of public lands (S. 3057)." The Senate Report on the bill brought out several important points. It was estimated that there was available water for from 60,000,000 to 100,000,000 acres. If the government should conserve water for 20,000,000 acres, it was thought individuals would make possible the reclamation of the remaining land. Cost of water conserva-

tion was said to range from \$5.00 up to \$25.00 per acre.1

The Senate Report included a table which summarized costs and benefits which could be expected from the proposed legislation.

# Summary of costs and benefits2

Moont muhlic land shout

Land now irrigated	acres	
Water supply is sufficient (when conserved)	99	
Necessary for the government to con- serve water directly for about 20,000,000 This will make possible the reclam-	n	
ation by private means at least an equal amount, or, in all 40,000,000 Probable expense to government, dur-	п	
ing 38 years, for 20,000,000, at \$15 per acre\$300,000,000		
Probable expense to individuals, following opportunities thus cre- ated, 20,000,000 acres, at \$50		
per acre\$600,000,000 Population made possible in 40 years		
as a result of reclamation 30,000,000		
Value of land brought under settle- ment (excluding buildings, cat- tle, improvements, etc.), 40,000,000 acres, at \$50 per acre		
in 40 years\$2,000,000		

In discussion of the measure, Senator Hansbrough pointed out that irrigation was not a sectional question. He stated that nearly all the leading eastern newspapers supported the proposed legislation. The measure was urgent because the public domain in the humid and sub-humid regions of the nation was virtually exhausted. To provide new homes, irrigation was necessary. Hans-

2 <u>Ibid.</u>, p. 4.

<sup>1</sup> Senate Reports, 57th cong., 1 sess., (1902), p. 3.

brough was especially concerned because so many homeseekers, in their eagerness for land, had begun to settle beyond the humid areas.1

It was brought out in the Senate discussions that fear of over-production of farm products was groundless. Although there was about 600,000,000 acres of land which might be irrigated, it was estimated that there was not sufficient water to irrigate more than five to ten per cent of this land. The plan was not to reclaim the whole area by government works. Irrigation experts of the Geological Survey declared that, in their opinion, 20,000,000 acres would be the limit of land reclaimed by waters conserved by government projects. With the government developing the major sites, it would be possible for private enterprise to reclaim about an equal amount. A table was presented to show that reclamation would be a gradual process. It was assumed that \$2,000,000 per annum would be available for construction and that it would take two years to construct works and sell the land.

According to this table, it appeared that less than 1,373,998 acres of land would be reclaimed in nine years under this bill.2

<sup>1</sup> Cong. Rec., 57th cong., 1 sess., p. 1383.

Table 1. Gradual process of reclamation.

	: :Receipts from	:Receipts from :		: : Lands
Year	:sale of :public lands	:claimed lands : :at \$15 per acre:	Total receipts	: reclaimed : (acres)
1902	\$2,000,000	647 689	\$2,000,000	
1903	2.000.000		2,000,000	133,333
1904	2,000,000	200,000	2,200,000	133,333
1905	2,000,000	400,000	2,400,000	146,667
1906	2.000.000	620,000	2,620,000	160,000
1907	2.000.000	860.000	2,860,000	174,666
1908	2,000,000	1.122.000	3,122,000	190,666
1909	2.000.000	1.408.000	3,408,000	208,133
1910	2,000,000	1,720,200	3,720,200	227,200
			Total	1,373,998

Another matter of concern was that, under existing land laws, sources of water supply were being taken up for speculative purposes. In order to control the growth of vested rights, immediate Congressional action was necessary. Such legislation was logical because it was the settled policy of the United States Government to appropriate the public lands for the benefit of the new settlers and the development of agriculture. Senator Hansbrough stated:

The people of the country, as personified by the Government, are the great landowners. They, as a whole, are benefitted by the disposal of the vacant lands, the settlement of the waste places, and the consequent increase of manufacturing and transportation. They can afford to disregard questions of immediate profit in favor of the ultimate settlement of the arid region.

The bill had been well publicized and had much popular sup-

<sup>1</sup> Tbid., p. 1385.

port. It passed in the Senate without much opposition, but difficulties were encountered in the House. There had been a sharp split among the proponents of irrigation measures as to the kind of plan they wished to see adopted. One group favored direct appropriations, and the other wanted the plan embodied in the Newlands Bill. It was necessary for the westerners to resolve their difficulties in order to achieve a federal program of reclamation.

After the bill was passed in the Senate, President Roosevelt invited some of the members of the Irrigation Committee of the House (both Republican and Democrat) to confer with him. He expressed doubt that the bill guarded the interests of homeseekers sufficiently. In order to preserve the public domain in small tracts for actual settlers and homebuilders and to prevent monopoly and concentration of ownership, certain small changes in the construction of the bill were made. Newlands pointed out that this was not the result of executive dictation since the changes were in complete accord with the original bill.

The House resolved itself into the Committee of the Whole House for consideration of the bill. The forces advocating the legislation were led by Newlands (Nevada), Mondell (Wyoming), Shallenberger (Nebraska), and Shafroth (Colorado). The urgency of the measure was stressed. The limit of development by private enterprise had been nearly reached. Newlands said:

Small tracts, favorably located with reference to water supply, may continue to be reclaimed by settlers,

<sup>1</sup> Tbid., p. 6674.

but nothing in the way of a general system can be successfully inaugurated and carried out by individual effort. Nearly every enterprise of the kind heretofore undertaken has proved a financial loss to the projectors, in fact, has resulted in bankruptcy, altho, as shown by the official statements of the Geological Survey, the bankrupt enterprises have created large values and conferred great public benefits.

In addition to the inability of private enterprise to make further developments until the national government had carried out certain initial works, there was the problem of land absorption. Lands had been taken up rapidly by grazing and speculative interests. The demand for homes necessitated prompt action if suitable lands were to be made available. Under existing land laws sources of water supply were becoming monopolized by controllers of the large cattle ranges. If vested rights were in control of all water rights, it would not be possible for the government to secure water for its lands.

A fear of loss of citizens to Canada because of available lands there was expressed by many. It was estimated that 50,000 Americans had gone across the border into Canada in 1901. Cheap lands were available in the Dominion of Canada, and the loss of a young and vigorous element of our population was deplored. The question was asked those opposing the bill if they preferred the development of Canada to the development of their own country.

One source of the increasing population and demand for homes was from the immigrants. On the average from 1892 to 1901, nearly half a million foreigners had settled here yearly. These immigrants were able to subsist on a low wage scale which had

<sup>1</sup> Ibid., Appendix p. 254.

caused many American laborers to move west in an effort to better their economic condition. The argument was that opening new lands for settlement by federal reclamation would provide new homes for about 50,000,000 people. Employment would be provided for our surplus labor.

The favorable effect the proposed legislation would have on commerce and business was also regarded as important. Shallenberger (Nebraska) said, "This question means more to the progress and growth of this country, to its commercial greatness and its material welfare, to its prosperity and its national glory than all the other questions that we have had before us in this Congress." A large and vigorous population in the West would stimulate markets in the East. The increase of wealth in the community brought about by irrigation would be of general benefit to business.

In addition to making agriculture possible in the arid regions, irrigation would make possible the development of lower grade mining interests. Agricultural development would decrease living costs and bring cheaper transportation. This in turn would make possible the profitable working of lower grade mines.

Prosperity in the West would make itself felt throughout the nation. Activity in the West should cause stimulation of markets of all kinds in the East. It would also benefit the whole country because many of the actual settlers who would secure possession of the reclaimed lands would come from the eastern states.

<sup>1</sup> Tbid., p. 256.

Another point advanced in favor of the proposed legislation was the favorable effect reclamation would have on river control. Newlands pointed out that the purpose of irrigation works was to prevent the torrential flow of those rivers whose source was in the mountains, and to conserve the waters in great artificial reservoirs until drouth necessitated their use. Storage of water in reservoirs would do much toward maintaining the equal and sustained flow of the rivers.

Many of the Representatives felt it was their duty to support the Newlands Bill since it had been so strongly endorsed by the party platforms. The belief was expressed that these planks were the expression of the wishes of the people and not of politicians. Fresident Roosevelt's vigorous approval and support of the measure was also taken into consideration. Since it was in harmony with the platforms of all political parties in 1900, it was considered a non-partisan measure. Irrigation was an old question, but successful legislation could not be accomplished until the importance to the whole country was generally understood. It was felt that the opportune time had at last arrived.

Reclamation of arid public lands by the government would be an intelligent business proposition. Worthless property could be changed into a valuable asset. Lands that could not be disposed of at any price except in large holdings for stock-raising would become property suitable for homebuilding and agriculture.

Foreign trade could be increased with surplus food products

<sup>1</sup> Tbid., p. 257.

of the irrigated region. Because of high transportation costs, it was logical to assume that surplus goods would be sent to the Pacific for the ready Criental market and a larger profit.

In spite of popular sentiment in favor of national reclamation, the bill was subjected to severe opposition. The representatives of Pennsylvania, New York, and Ohio led the attack. Their principal argument was that the bill was unconstitutional. Representative Ray (New York) stated that the Constitution of the United States gave to the Congress of the United States full and complete power over the subject of interstate and foreign commerce. It was under this clause, Mr. Ray believed, that river and harbor legislation was possible. Irrigation of public lands for sale to private owners did not promote interstate or foreign commerce nor did it promote the general welfare in the constitutional sense. 1 The minority report listed three reasons why the bill could be considered unconstitutional. The improvement of public lands for sale was not a governmental purpose or an object for which the government was established. Second, the Constitution conferred no such power either expressly or by implication. The last reason was that the Constitution, in express terms, limited the powers of Congress over our public lands to the disposition thereof and the making of needful rules and regulations.2

Some of the eastern Representatives felt that support of

2 Loc. cit.

<sup>1</sup> Cong. Rec., 57th cong., 1 sess., p. 6683.

this measure would be in reality support of legislation which would promote injurious competition for their own constituents. They said that the bill was unjust and unfair to the farmers of the East and a sectional scheme to promote Western development. It was contended that the plan would use money belonging to all of the people to build up only one section of the country. Since the bill did not provide what particular arid lands were to be irrigated or the location of the irrigation works, it would be possible to use the whole fund for the benefit of any one state or territory. Receipts from the sale of public lands would be inadequate for the construction of irrigation works in all of the states and territories mentioned in the bill.

Dangerous powers would be granted to the Secretary of Interior. The bill did not expressly limit his powers in letting contracts to limit the cost to the amount of money that was in the reclamation fund. It did not say that the amount of money required for the completion of these contracts would not exceed the amount of money in the reclamation fund at the time the contract was made. By controlling the reclamation fund and having the power to make the rules and regulations, the Secretary of Interior would be the supreme power. The minority felt that this was a very dangerous power, and there would be a strong possibility of scandal under such a set-up.

The charge was made that land-grant railroads were the principal promoters of the legislation. The great railroad interests

<sup>1</sup> Ibid., p. 6693.

of these sections had said that their support was due to the hope of promoting Asiatic trade. Representative Grosvenor (Ohio) expressed the minority viewpoint:

No wonder that these great railroad lines are here in mighty force to carry this measure through, for millions of acres of this land are still owned by the railroad companies. It was given to them as an absolute gift...

And now they come and say, "You have given us this land; you have given us this subsidy of money; now put four, five or six times the value into that land by taxing the people of this country for the money to do it indirectly, and then we will show you a competition ....that will crush the farming industry of the entire great central West and East."1

The Minority Report repeated this sentiment and stated that land-grant railroads would be the real beneficiaries of the legislation. The railroads passed through the arid and semi-arid regions, and they owned large tracts of those lands. The construction of irrigation works and reservoirs at public expense would bring railroad lands into the market at 20 times their former value.<sup>2</sup>

Impossibility of execution was also mentioned. The question of whether the Federal Government possessed the power of eminent domain was regarded as a major issue. The minority contended that the United States Government had no power to obtain possession or control of streams arising outside the public domain. The rights of United States were the same as a private owner of lands and were subject to the sovereignty of the individual states. It was denied that the Government of the United States

<sup>1</sup> Ibid., p. 6723.

<sup>2</sup> Tbid., p. 6694.

had any power to condemn lands or water rights in one state for use and improvement for sale of lands located in another state.

It was pointed out that the whole matter should be left to the states since the whole country was not concerned. Expenditure of millions of dollars of the public funds for the improvement of the public lands would not promote the general welfare of the entire nation and was, therefore, not justified by the welfare clause of the Constitution.

The minority arguments were answered by the proponents of the legislation. The period around 1900 was generally a conservative period, and the strict constructionist interpretation of the Constitution was generally accepted. It was with the point of constitutionality, therefore, that the majority was greatly concerned. It was pointed out that there was no distinction between giving the proceeds of the sale of public lands to education, to soldiers and sailors, to the railroads, and to giving the proceeds of the sale of public lands in these states for the purposes of reclamation. The Constitution gave Congress the right to dispose of the territory of the United States, and this was interpreted to apply to the proceeds of the disposal. The proceeds of the sale of public lands had been applied to any purpose which was regarded as promoting the general welfare. President Roosevelt had said in his first message to Congress that the storage of the floods in reservoirs at the head waters of rivers was but an enlargement of the policy of river control under

<sup>1</sup> Tbid., p. 6693.

which levees were built on the same streams.1

The question of condemnation of land and water rights for purposes of the act also received much attention. In some of the arid states, land and water rights could be condemned. In these states the Secretary of Interior would have the right of a private individual. The power of eminent domain was not necessary for carrying out the act, and, where the state laws did not authorize condemnation, it would not be practiced. The Geological Survey had already located over 400 sites which would not necessitate condemnation.

The contention that passage of the bill would open up farming lands of the West in competition with eastern and southern farms was refuted. The western lands would be open to settlement from all sections of the country. Had the preceding generations of Americans held such a belief, the Middle West would never have been developed. Reasons were given to show that there was no danger of an injurious competition between the East and the West. The arid region, even with irrigation, was not suitable for the same type of crops that were grown in the East. The northern part of the arid region would be largely devoted to alfalfa. The southern region could produce citrus fruits and other products of a semi-tropical nature. The main products for eastern markets would be in the luxury class, such as oranges, lemons, raisins, and wines. Transportation costs would eliminate cereal products. When the luxury products were sold in eastern markets, the profit

<sup>1</sup> Ibid., Appendix p. 257.

derived would return to the East to purchase staples and manufactured goods. The total prosperity of the country would be increased.

Some of the minority had expressed the view that irrigation measures should be left to the states, and the Federal Government should cede land to the states for reclamation purposes. It was answered that the general government had no right to give away land which was the potential home of millions. Since the government owned from 50 to 90 per cent of the area of the western states. it was unfair to expect these states to bear the financial burden of reclamation. In some cases they were already burdened with debt and had to furnish police protection to government land. The public domain was not subject to state taxation. and the individual states were quite limited in capital. In addition, the constitutions of some states forbid undertaking works of public improvement. 1 State boundary lines were arbitrary and not determined by topography or the control of watersheds. Few watersheds were entirely with the boundaries of a single state, and central control by the Federal Government was desirable. With this control, the entire watershed could be treated in a scientific way.2

Another answer to the opposition was on the question of expense. No money would be required for the program except the receipts from land sales in the states and territories included

2 Ibid., Appendix p. 254.

<sup>1</sup> Cong. Rec., 57th cong., 1 sess., p. 6676.

within the region. Newlands said:

The cost of all reservoirs, canals, and ditches constructed by the government is to be charged against the lands to be irrigated and paid in annual installments by the settlers before the title vests, thus constantly replenishing the fund and making the enterprise practically self-sustaining.

It was repeatedly asserted that the government did not need a direct revenue in order to profitably undertake the work. The government return would be a general increase of wealth in the community. Also emphasized was the fact that, although a large sum of money would be spent in the construction of irrigation works, under the provisions of the bill this money would be repaid. The reclamation fund, instead of decreasing, should eventually increase. The plan was to divide the cost of construction of the works among the acres of land that could be irrigated by these works.

A concluding argument was made by Shallenberger of Nebraska:

Mr. Chairman of the Appropriations Committee, if you will give us in the West a little of the money that you spend so freely in other portions of this country and in other portions of the world as well, we will build for you broader and better and closer markets than any you can find beyond the seas. We will build up a nation of men better than any you can find upon the other side of the world, because they will be white men, men of the mountains and men of the plains, men who will buy your goods and fight your battles, men who can ride far and shoot straight, men who will be the foundation of this nation's prosperity and credit in time of peace and the bulwark of her honor and glory in time of war.<sup>2</sup>

On June 13, 1902, the vote was taken. The result was 146

<sup>1</sup> Ibid., p. 256.

<sup>2</sup> Cong. Rec., 57th cong., 1 sess., p. 6706.

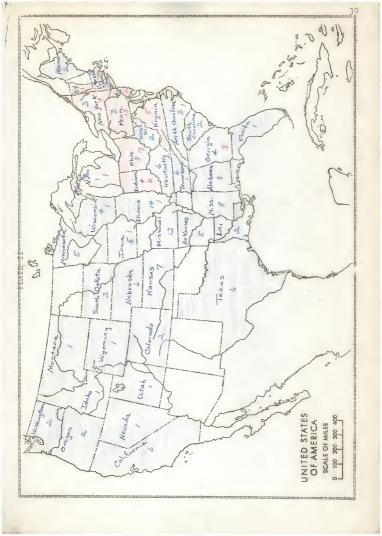
yeas and 55 nays. In addition to those paired, 150 representatives failed to express themselves. Plate II shows the distribution of votes by states. Individual votes are recorded to give an idea of degree of support from each state. Analysis of the vote does not show clearly the opposition which supposedly existed in the Mid-West. Thirty-seven of the 55 negative votes came from the eastern section. The remaining opposition was divided among the following states: Ohio (6), Indiana (6), Illinois (1). Iowa (1), Wisconsin (1), Michigan (1), and Tennessee (1). These states also registered votes supporting the measure. It would seem the agricultural competition argument did not bear as much weight as supposed. The fact that the vote of individual states was divided indicated that the legislation was not considered strictly on a sectional basis. The proponents of the legislation had converted many easterners to realization of the relationship of reclamation to the total progress of the country.

A plan for putting the bill into effect had been made. The Geological Survey had spent over ten years in studying various rivers and streams of the arid region: their capacity, their flow, and the possibilities of conserving waters. This background was helpful in entering upon the practical work of construction of irrigation works. As one of the most scientific bureaus of the government, the Geological Survey was held in high regard by Congress. The proceeds of the sale of the lands designated would go into a special fund in the Treasury, called the arid land reclamation fund, and would be spent under the direction of the Secretary of Interior. Mondell described the plan

# EXPLANATION OF PLATE II

Distribution of vote on Newlands Bill in the House.

Blue indicates yeas. Red indicates nays. State is shaded in the color which indicates the majority vote.



in this way:

The Secretary of Interior would make preliminary surveys and examinations in various portions of the arid region, utilizing the surveys which have already been made by the government. These surveys and examinations would be made with a view of determining the most feasible and practicable projects, as well as those deemed, under all surrounding conditions, to be the most urgent.

The examinations would necessarily be of a variety of projects, including large diversions, and reservoir projects, as well as projects combining both diversions and conservation of water. Before the beginning of the survey and examination of a project, or at such time during its progress as seemed advisable, the Secretary of the Interior would withdraw from entry the land required for the irrigation works, and by designation of the lands which it proposed to irrigate they would be withdrawn from entry except under the homestead law, and become subject to all charges, conditions, and limitations of the act, should the project be constructed.

# SIGNIFICANCE OF THE NEWLANDS ACT

The significance of the Newlands Act can best be understood by a knowledge of what has been accomplished through this legislation. It has made possible Federal development of irrigation and hydroelectric power in the western states. The original act has been interpreted and modified for later legislation, but the foundation remains the same.

The agricultural development of any country is a determining factor in that country's industrial growth and in its ability to attain a high civilization. By promoting the agricultural development of the West, the Reclamation Act aided our industrial

<sup>1</sup> Tbid., p. 6678.

growth and progress as a nation. It was the first land law passed by Congress which reduced an agricultural entry to less than 160 acres and which required continuous residence upon the land for five years as a prerequisite to perfection of title. The farm unit upon the Reclamation Projects was usually fixed at 40 to 80 acres.

Another significant accomplishment was in the field of water rights. Local laws and customs concerning the appropriation and distribution of water were recognized. States had control over the use of waters within their borders. The main-line canals were to be constructed by the government, the entryman or landowner would construct necessary laterals for the irrigation of his own tract. After the water was beneficially applied and payments were made under the provisions of the bill, the water right would become appurtenant to the land irrigated. The water rights provided for by the act were of the character which irrigation experience had demonstrated to be the most satisfactory.

The record of accomplishments of the Reclamation Act began soon after President Roosevelt signed the bill on June 17, 1902. This was possible because the bill was so carefully constructed and there was a great deal of information about reservoir sites and possible irrigation projects available from previous work of the Geological Survey and from private enterprise. The law was so general that success depended a great deal upon successful administration. The Secretary of Interior placed the reclamation work under the Geological Survey. One of the first undertakings was in the Salt River Valley in Arizona where many canal corpor-

ations and private individuals had started irrigation works. The results were far from satisfactory, and it was a good chance to prove the merits of the Reclamation Service. Plans were made to construct a storage dam on the Salt River which should yield water for the irrigation of privately-owned lands of the valley. After the plans were approved by the Secretary of the Interior, in March, 1903, the Salt River Valley Water Users' Association was organized and work begun.

Golze gives the following summary of early work accomplished by the Reclamation Service:

Within one year after passage of the Reclamation Act. four projects had been authorized. In 1904, seven other projects were authorized: in 1905, nine projects were authorized; in 1906, three; and in 1907, one; for a total of 24 projects authorized within five years of passage of the Reclamation Act. In the ten years following 1907, only three projects were authorized, one in 1912, one in 1917, and one in 1918. The undertaking of a widespread program was an effort to bring the benefits of the act to as many states as possible. Dr. Newell, in testifying on the proposed Reclamation Act in 1901 before Congress and in his first annual report as Chief Engineer of the Reclamation Service, emphasized that there should be a thorough investigation of the location of lands and a careful study of the soils and water supply of proposed projects before undertaking actual construction. President Roosevelt in his message to Congress in December, 1901, had said, "It would be unwise to begin by doing too much for a great deal will doubtless be learned, both as to what can and what cannot be safely attempted, by the early efforts, which of necessity be partly experimental in character."1

This liberal legislation in a generally conservative period is noteworthy. It marks an adventure with paternalism by the Federal Government. It is particularly significant because it

<sup>1</sup> Golze, Reclamation in the United States, p. 26.

laid the foundation for succeeding reclamation legislation.

### CONCLUSION

The success of the Newlands Bill was due in part to the care with which the bill had been written. After the failure of the measure in the 56th Congress, the bill was rewritten to eliminate many of the faults. Especially important from this standpoint was the provision for financing out of the proceeds from disposal of public lands. The bill was prepared and drafted, not by theorists or economists, but by men with practical experience with irrigation work. Frederick H. Newell, first Chief Engineer of the Reclamation Service, is credited with much of the actual authorship of the bill.

An understanding of the historical background of national participation in reclamation is valuable because one can often find solutions to today's problems in the study of earlier problems. Representative Ray (New York) was prophetic when he declared in 1902 that the reclamation fund from land sales would prove insufficient to finish works in the process of construction. He feared a demand for direct appropriations in order to save investments in projects which could not be completed with funds available.

Nearly one-half the area of the United States has been favorably affected by the Reclamation Act. A basic understanding of a subject which has such an important bearing on the prosperity of our nation is a necessity if one wishes to be an intelligent and informed citizen.

## ACKNOWLEDGMENTS

The writer wishes to express gratitude to Dr. A. Bower Sageser for his encouragement and constructive criticism as major advisor.

Acknowledgment is also due Roy Doty, engineering student at Kansas State College, for assistance in constructing the hydrograph.

#### BIBLIOGRAPHY

#### Books

- Golze, Alfred R. Reclamation in the United States. New York: McGraw-Hill Book Company, Inc., 1952.
- James, George Wharton. Reclaiming the Arid West. New York: Dodd, Mead and Company, 1917.
- Mead, Elwood. <u>Irrigation Institutions</u>. New York: Macmillan Co., 1910.
- Powell, John Wesley. Report on the Arid Region of the United States. Washington: Government Printing Office, 1879.
- Smythe, William E. The Gonquest of Arid America. New York: Harper and Brothers, 1900.
- Stegner, Wallace. Beyond the Hundredth Meridian. Boston: Houghton Mifflin Company, 1954.
- Teele, Ray Palmer. Irrigation in the United States. New York:
  D. Appleton and Company, 1915.

## Periodicals

- Chittenden, H. M. "Government Construction of Reservoirs in Arid Regions." North American Review, February 1902, 174:245-258.
- Draper, William R. "Irrigation: How the Federal Government is Reclaiming Arid Land and Almost Giving It Away to the Homeless Man." <u>Independent</u>, May 20, 1908, 64:1172-1178.
- Hess, R. H. Beginnings of Irrigation in the United States."

  Journal of Political Economy, October 1912, 20:807-838.
- Gance, John T. "The Origin of a National Reclamation Policy." <u>Mississippi Valley Historical Review</u>, June 1931, 18:34-52.
- Mead, Elwood. "Problems of Irrigation Legislation." Forum, January 1902, 32:573-581.
- Smythe, William E. "Irrigation in the West: A Plan of Action for the National Government." Review of Reviews, January 1902. 25:75-80.

## Government Documents

- Congressional Record, 57th congress, 1 session. Washington: U.S. Government Printing Office, 1902.
- Gilbert, G. K. "John Wesley Powell." Annual Report of the Board of Regents of the Smithsonian Institution for the year ending June 30, 1902, p. 633-640. Washington: Government Frinting Office, 1903.
- Newell, F. H. "First Annual Report of the Reclamation Service." House of Representatives Document No. 79, 57 cong., 2 sess. Washington: Government Printing Office, 1903.
- of the Smithsonian Institution for the year ending June 30, 1901, p. 407-423. Washington: Government Printing Office,
- port of the Board of Regents of the Smithsonian Institution for the year ending June 30, 1904, p. 373-381. Washington: Government Printing Office, 1905.
- "Senate Report No. 254." Senate Reports, 57 cong., 1 sess. Washington: Government Printing Office, 1902.

# CONGRESS AND THE NEWLANDS ACT

by

## SHIRLEY BARCLAY NEAL

B. S., Kansas State College of Agriculture and Applied Science, 1947

AN ABSTRACT OF A THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of History, Government, and Philosophy

KANSAS STATE COLLEGE OF AGRICULTURE AND APPLIED SCIENCE The purpose of this study was to determine the arguments, both supporting and opposing, which were used in the congressional debates on the Newlands Bill, and to discover the significance of the legislation. Congressional Records covering discussions of the bill, reports of governmental agencies, and periodicals of the time were among the sources examined to determine these factors.

Physical characteristics of the arid region were discussed, and the area included was limited to that portion of the United States which is west of the hundredth meridian. Average annual rainfall of under 20 inches was the chief characteristic of the region. Land could be divided into irrigable, timber, or pasturage lands.

A brief history of the background of irrigation in the United States is given. Early contributions were made by the Indians and Spaniards. The beginning of modern irrigation in 1847 is credited to the Mormons.

Factors necessary for successful irrigation were water, suitable topography of land, and altitude that was not too high. Cooperative labor or capital was needed to finance the work. When private enterprise proved inadequate to meet irrigation needs, the movement for federal participation began. Early leaders were Major John Wesley Powell, F. H. Newell, William E. Smythe, and George Maxwell. Irrigation congresses were held for the purpose of publicizing and supporting the movement.

Early opposition came from stockmen who had leased grazing land. They opposed the agricultural development of the West as it would conflict with their interests. There were also many who believed reclamation should be left to the individual states. The Carey Act of 1894 was designed to aid the public-land states in the reclamation of desert lands.

Major political party platforms all showed support of national participation in reclamation measures in 1900. An unsuccessful bill was introduced by Representative Newlands in 1901. This accomplished open discussion and aroused eastern interest in the arguments, and by 1902 successful legislation was possible. Major arguments for the bill included the urgency of the measure, provision of homes and outlet for surplus population, economic possibilities for the whole nation in the development of the West, river control, benefits to semi-arid and adjacent regions, and oriental trade increase. The minority raised the following issues: constitutionality of the bill, money belonging to the whole nation would be used for the benefit of one section, dangerous powers would be granted to the Secretary of the Interior, would create competition for the farming interests of the East and Mid-West, the bill was supported by railroad interests, it was impossible of execution, and a violation of states! rights.

The opposition arguments were satisfactorily answered, and the bill passed without difficulty in the Senate. In the House, there was a group of Representatives that caused considerable difficulty, but the proposed legislation was eventually successful and passed 146 to 55 on June 13, 1902. Four days later, President Roosevelt signed the bill and it became law.

The Secretary of the Interior was given wide powers under

the bill and lost little time in starting construction of projects. This was possible because the Geological Survey had collected much valuable information on river flow, possible reservoir sites, and topography of the region.

The Newlands Act or Reclamation Act of 1902 provided the basis of later reclamation law. It proved to be well-written and aided the development of the West. A study of reclamation of the western arid lands and the institutions necessary for irrigation enables one to gain a new interpretation of the role the West has had in the development of our nation.

