



Application of the 160-acre limitation in the development and operation of farms on irrigation projects
by Paul A Pilati

A THESIS Submitted to the Graduate Faculty in partial fulfillment of the requirements for the degree
of Master of Science in Agricultural Economics

Montana State University

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Abstract:

This thesis analyzes the problem of maladjustment in the use of resources in Reclamation resulting from restrictions imposed by the 160-acre limitation. It develops suggestive analyses of the problem with respect to size of farms and shows what alternatives in size in various sites would accomplish in terms of efficiency, income producing ability, and the family farm concept as a basis for legislative and administrative decisions.

In developing the problem, a series of farm budgets were prepared. These show typical organizations, output, and costs in relation to various land classes in four Reclamation study areas. The study areas are the East Bench Unit, Greenfields Division, Huntley Project, and Heart Mountain Division.

Size of farm was the controlling variable, with net returns per acre and net hourly returns to farm family labor and management the principal indicators of efficiency. Total net returns per acre and an income goal of \$3,000 were the measures of income producing ability.

The family farm concept was defined in terms of labor utilization.

In order to reflect the income producing ability of land, all crops, including pasture, were sold. For the same reason, no livestock enterprises were utilized.

In terms of efficiency, income producing ability, and the family farm concept, the findings suggest a farm size of 320 acres. At one extreme is the Huntley Project with a modal group of 240 acres while at the other extreme is the East Bench Unit with a modal group of 480 acres.

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181

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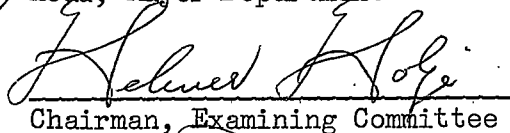
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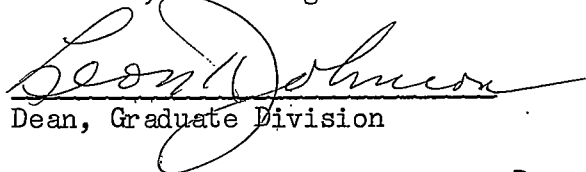
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Errors of omission and commission remain, of course, my sole responsibility.

ABSTRACT

This thesis analyzes the problem of maladjustment in the use of resources in Reclamation resulting from restrictions imposed by the 160-acre limitation. It develops suggestive analyses of the problem with respect to size of farms and shows what alternatives in size in various sites would accomplish in terms of efficiency, income producing ability, and the family farm concept as a basis for legislative and administrative decisions.

In developing the problem, a series of farm budgets were prepared. These show typical organizations, output, and costs in relation to various land classes in four Reclamation study areas. The study areas are the East Bench Unit, Greenfields Division, Huntley Project, and Heart Mountain Division.

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In terms of efficiency, income producing ability, and the family farm concept, the findings suggest a farm size of 320 acres. At one extreme is the Huntley Project with a modal group of 240 acres while at the other extreme is the East Bench Unit with a modal group of 480 acres.

APPLICATION OF THE 160-ACRE LIMITATION IN THE
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I. INTRODUCTION

Earl L. Butz, Dean of Agriculture at Purdue University asks:

Will the people who man the farms of America be permitted to share fully in the benefits growing out of modern science and technology, or must they live with a ceiling over opportunity imposed by governmental programs designed to maintain small, inefficient, often peasant type production and living units on the land? 1/

The Problem

Settlers on Reclamation projects have been and are experiencing economic and social difficulties--difficulties which are, at least in part, due to the initial shortcomings of our land settlement policies. Any policy, or lack of one, impinges directly on the farm firms, and through the firms it will result in adjustments in irrigated agriculture. For this reason the Reclamation farm unit will become the primary unit of study, both in appraising the effects of these institutional stimuli on the individual farm, and the aggregate effects on projects and Reclamation as a whole.

Although the reservoirs and canals built by Reclamation are a success in an engineering sense and have created wealth in land,

1/ Earl L. Butz, United Press release, May 7, 1958.

much less can be said of the economic and social views which have symbolized Reclamation. 2/

Initially, it was assumed that the sole responsibility of Reclamation was the construction of supply and distribution works and that this in turn would be followed by successful settlement. Settlement was opened to anyone. Terms such as experience, efficiency, and capital reserve were as unfamiliar as was the practice of land-leveling. Success was measured in terms of sweat and endurance. 3/

As time progressed, the necessary ingredients of higher civilization such as suitable homes, roads, and schools reduced the settler's development capital to almost nil. This made it necessary for the government to instigate repeated amortizations and leniency acts in order to bail the settler out of financial straits. 4/

Historical Setting

Colonial America was the setting for an oppressive land monopoly thrust upon it by England. Characteristic of this English policy were

2/ Dorothy Lampen, Economic and Social Aspects of Federal Reclamation, Baltimore; The John Hopkins Press, 1930, p. 5.

3/ Ibid.

4/ U. S. Statutes At Large XLII, 4; XLII, 489; 1324; XLII, 116.

the remnants of the antiquated feudal system including estates tilled by indentured servants, primogeniture, and entail. ^{5/} The Crown restricted westward emigration beyond the Alleghenies and disposed of land in large estates. This in turn led to economic and social differences among the citizenry through development of a small landed gentry and a large landless class--a class which was the main support of the Revolutionary War and from whom originated the family farm philosophy.

Confiscation of the Tory estates and vast domain of the Crown within the Colonies by the Colonial legislatures, together with agreement that the lands west of the Alleghenies should be common Colonial property, led to the breakdown of the large estates and creation of the original Public Domain. ^{6/} This Public Domain could mean revenue for a nearly bankrupt nation or a new way of life for the poverty stricken landless.

^{5/} The modern Anglo-American law of land derived from English Feudalism was established after the Norman Conquest of 1066. Theoretically, the king was the ultimate owner of all land; in practice, however, certain land was held according to earlier custom--feudal tenants always held land of another to whom obligations were paid. With primogeniture, the exclusive right of inheritance belonged to the first born male while through entail an estate was given to the donee and to his issue or a class of his issue. As a result, alienation of the land out of the prescribed line of succession was prevented.

^{6/} U. S. Department of Interior, Land Ownership Survey on Federal Reclamation Projects, Bureau of Reclamation, Washington; Government Printing Office, 1933, pp. 64-65.

At first the dominial policy of selling large units for comparatively high prices prevailed. This did not prove satisfactory, so in 1796 the alienation theory of selling in small plots and the 160-acre ideas were conceived. This, too, proved only half successful due to the lack of repayment ability on the part of the landless.

The Pre-emption Act of 1841 marked the end of the old conservative land policy and in it Congress recognized four important principles: 7/

1. Settlement of the public domain was more desirable than revenue from its sale.
2. The public domain should not fall into the hands of those already having sufficient land.
3. The unearned increment should be spread widely, i.e., the principle of acreage limitation was embedded in American land policy.
4. Protection of the settlers was important and a "reasonable time" for repayment was allowed.

A growing sentiment for widespread ownership of land by land settlers was evidenced by the many attempts at passage of bills containing many of the provisions later included in the Homestead Act of 1862, the Desert Land Act of 1877, and the Reclamation Act of 1902. 8/

7/ Ibid., p. 69.

8/ Congressional Record, pasim., Vol. 35, Part 7, 57th Congress, 1st Session, pp. 6678-79; see also pp. 1383-1386, 2218-2224, 2276-2285, 2381, 3812, 6669, 6674-6708, 6722-6779, 6794, 6892-6895, and 6977.

The Homestead Act made bona fide residence a condition for obtaining title, thereby supplanting the sales system--the change from use of land as a source of revenue to encouragement of homebuilding. The Desert Land Act marks the first attempt on the part of the Federal Government to aid in the reclamation of arid land.

The last 30 years of the 19th Century was used to develop a coherent public mind on irrigation and was divided into 3 periods of emphasis: 2/

1. Period of development by private enterprise--characterized by encouragement of individual effort with passage of the first irrigation district law in Utah in 1865 as a means of financing irrigation development.
2. Period of state control--characterized by passage of the Carey Act in 1894 and its placing of public lands in amounts not to exceed 1,000,000 acres, into the hands of certain states. For their part in the transaction, the states were to cause the lands to be settled, irrigated, and a portion of them cultivated.
3. Period of federal Reclamation--characterized by Federal control and financed from a revolving fund set up initially from the sale of public lands in 16 western states. Federal control dates from passage of the Reclamation Act.

2/ Dorothy Lampen, op.cit., p. 20.

In the 160 years during which the land policy of the United States was formalized, these two basic principles evolved:

1. Maximum number of settler ownership opportunities on family-sized farms.
2. Prevention of land speculation and land monopoly through a policy which was designed to distribute the benefits of Public Domain widely and which actually favored settlers against speculators and monopolists of the day.

These fundamental principles have been reiterated time and time again, not only through acts of general and special application, but also through statutory provisions, administrative rulings and opinions of the official Solicitor and the courts. ^{10/} This basic principle of wide ownership and prevention of speculation has been supported by major and minor political parties alike, by Republican and Democratic congresses, and by many of our presidents. ^{11/} We even find a historical precedent in the history of the Roman Empire. The Gracchan reforms

^{10/} F. W. Mondell, Congressional Record, Vol. 35, Part 7, 57th Congress, 1st Session, pp. 6678-79. The 160-acre limitation is the device enacted by Congress to extend the historic American land policy to the combination of land and water in the arid and semi-arid west. See also pp. 1383-1386, 2218-2224, 2276-2285, 2381, 3812, 6669, 6674-6798, 6722-6779, 6794, 6892-6895, 6977.

^{11/} U. S. Department of Interior op. cit., p. 61. This is especially true of presidents such as Thomas Jefferson, Abraham Lincoln and Theodore Roosevelt who abolished relics of feudalism, and signed the Homestead and Reclamation Acts, respectively.

of 133-122 B.C. parallel the development in our land policy. Tiberius Gracchus wanted economic and social reform that would bring the small landowner farmer back to agriculture. 12/

Previous Work

Although scores of authors have written hundreds of volumes both eulogizing the traditional 160-acre principle as a bulwark of our democracy and bitterly denouncing it as contrary to the American tradition of free enterprise, 13/ none have managed to successfully sharpen the issues with respect to evaluation under any given circumstance. 14/

12/ Albert A. Trever, History of Ancient Civilization, New York; Harcourt, Brace and Company, 1939, pp. 155-170.

13/ See, for example, Paul S. Taylor, The 160-Acre Water Limitation and the Water Resources Commission, The Western Political Quarterly, Vol. III, No. 3, September 1950, pp. 435-449; see also F. W. Mondell, Congressional Record, op. cit.

Paul S. Taylor, The Excess Land Law: Legislative Erosion of Public Policy, Reprint, Vol. 30, No. 4, Rocky Mountain Law Review, June 1958, pp. 1-35.

U. S. Congress, Senate, Subcommittee on Irrigation and Reclamation of the Committee on Interior and Insular Affairs, Acreage Limitation Review, Senate Reports 1425, 2541 and 3448, 85th Congress, 2d Session, Washington; Government Printing Office, 1958.

Angus McDonald, One Hundred and Sixty Acres of Water, the Story of the Antimonopoly Law, Public Affairs Institute, Washington, 1958.

14/ U. S. Congress, Senate, Subcommittee on Irrigation and Reclamation of the Committee on Interior and Insular Affairs, op. cit.; see also California Legislature, Joint Committee on Water Problems, Transcript of Hearing of 160-Acre Limitation, February 19, 1947, Sacramento.

The greatest part of the work done to date avoids the essential economic problems and has dealt largely with limited ownership and its economic and social problems concerned with the distribution of the unearned increment in land values created by Federal Reclamation.

Generally the writings do not distinguish between (1) the extent of ownership units as compared to operating units on Federal projects, (2) the extent to which operating units on these projects actually are limited to ownership units, (3) the tenure situation including extent of absentee ownership and effects thereof in regard to cropping practices and conservation, (4) the effect of the law in relation to efficiency and organization of the individual farm firm and, finally (5) the adjustments needed in the institutions that limit the development of efficient and adequately-sized farms on irrigation projects. These are the essential problems as regards to the 160-acre rule.

Although many of the authors have attempted to present scientific studies in regard to the myriads of facets concerning the 160-acre rule, most fail to retain objectivity in their analyses. The result seems to be a trend toward either business or social objectives, with subjectivity reflecting the writers' biases.

Research Problem

The fact that settlers on Reclamation Projects are having serious economic and social difficulties gives rise to the question of whether

or not these problems are, in part, due to some deficiency in Reclamation law.

We can conclude that the basic philosophy behind Reclamation is to provide as many family farms as is possible. Essential to this philosophy is a definition of the family farm and statement of the 160-acre limitation.

Family farm: The family farm may be defined as one for which the principle source of labor is the farm family, and one which is of sufficient size and productivity to pay expenses, including food and shelter, medical care, education and recreation, and permit the accumulation of a reserve sufficient to meet the needs of old age. 15/

Reclamation has not, however, accomplished the ends embodied within the foregoing definition. It has, on the other hand, tended to ascribe to the maximization of settler numbers. This is reflected in the establishment of a system of farms which yield minimum rates of return to farm resources, especially to operator, family management, and labor. 16/

160-acre limitation: No right to the use of water for land in private ownership shall be sold for a tract exceeding 160 acres to any one landowner, and no such sale shall be made to any owner unless he be an actual bona fide resident on

15/ Sherman E. Johnson, et al., Managing a Farm, New York; D. Van Nostrand Co., Inc., 1946, p. 23.

16/ Anonymous, Size of Farms on Federal Reclamation Projects, (Agricultural Research Service, United States Department of Agriculture) December 1957 (dittoed), p. 5.

such land, or occupant thereof residing in the neighborhood of said land, and no such right shall permanently attach until all payments therefore are made. ^{17/}

We must keep in mind that when the proposal was adopted to develop the semi-arid West, Congress used the rules that had evolved for the settlement of the humid East. These rules, especially the idea of the 160-acre limitation which was conceived in 1796 by Congressman Findley of Pennsylvania, were quite appropriate to implement the principles of our land policy during our early agriculture. They lack, however, the flexibility needed to adjust to differing environmental conditions, technological change and changes in demand.

Objectives

The general objectives of this study are:

1. To summarize the trends and problems with respect to sizes of farms and their relation to the objectives of reclamation.
2. To show the economic characteristics of alternative sizes in various sites.

Specific objectives are:

1. To show why the limitation was imposed--why 160 acres.
2. To show how the law has been interpreted and administered and how it applies today.

^{17/} U. S. Department of Interior, Bureau of Reclamation, Federal Reclamation Laws Annotated, 2nd Edition, Washington; Government Printing Office, 1947, p. 53.

3. To show what exceptions have been established by congressional action and upon what circumstances they were based.
4. To show the effect of the application of the law in relation to efficiency and organization of the individual firm.
5. To make recommendations for adjustments in the institutions that limit the development on irrigation projects of farms that would be efficient and produce adequate income.

II. ANALYSIS OF RECLAMATION ACT

When the Reclamation Act was passed in 1902, it stressed limitation of land monopoly through (1) promotion of family-sized farms owned and operated by the individual farmer, and (2) prevention of land speculation. 1/

Major Weaknesses

The Reclamation Act was based upon arguments which emphasized the importance of homebuilding, conservation, and relief of congested areas-- matters involving social rather than economic ends. Failure to provide for differences that exist between projects associated with site such as growing season, basic soil materials, location with respect to markets, and other factors that determine production levels, costs and alternatives or even the differences in productivity of various sites within projects, has led to social as well as economic distress within Reclamation. Failure to anticipate the necessity of increased cash requirements (due to technological change) for farm operation and family living has increased this distress. Further, unavailability of capital through

1/ F. W. Mondell, Congressional Record, op. cit., the second aim was of major importance due to the landed monopolies which flourished in the western United States during the latter part of the 19th century. The policy was designed to distribute the benefits of public domain widely by actually favoring settlers against speculators and monopolists of the day.

credit sources to small units in newly developed or high-risk areas 2/ stresses the need for introducing flexibility into reclamation law.

The politically popular motive for perpetuation of the 160-acre rule manifests itself directly in the necessity of "selling" a Reclamation project to Congress. 3/ The traditional logic used in convincing the House of Representatives in order to receive appropriations is to (1) stress creation of the maximum number of settler opportunities, and (2) stress the accepted principle of spreading the unearned increment created by Reclamation as widely as possible--hence, the stress on the traditional 160-acre rule by our lawmakers.

Firmness of principle with flexibility to allow adjustment to changing conditions was the intent of the legislators in passage of the Reclamation Act as evidenced by Congressional hearings. 4/

2/ U. S. Congress, Senate Committee on Interior and Insular Affairs, Senate Report 1482, 85th Congress, 1st Session, Washington; Government Printing Office, 1957.

3/ The 17 western Reclamation states have strength in the Senate with representation totaling 34 of the 96 members. Appropriations originate in the House of Representatives, however, wherein the Reclamation states are weak.

4/ F. W. Mondell, op. cit., p. 6679. In quoting President Roosevelt, Mr. Mondell shows that there should be adjustment possibilities in the Reclamation Act, i.e., flexibility.

Major Points

Section 3 of the Reclamation Act specifies that each entry must not be less than 40 nor more than 160 acres. It also provides that the commutation provisions (substitution of money payment for usual work and resident requirements) of the Homestead Laws shall not apply to entries made hereunder. 5/

Section 4 provides that when the Secretary determines that an irrigation project is practicable, he must establish the area per entry at such acreage within the above limits as he considers necessary for the support of a family. 6/

Interpretation of section 5 provides that after establishing the initial farm unit it is necessary to relinquish that part of the farm which is in excess of one farm unit. 7/ Department decisions of the Secretary of Interior permitted a husband who was forced to relinquish that portion of his holding in excess of one farm unit to assign a portion of that farm to his wife. 8/

5/ U. S. Department of Interior, Bureau of Reclamation, Federal Reclamation Laws Annotated, op. cit., pp. 16-77.

6/ Ibid., p. 40.

7/ Instructions of the Acting Secretary, August 5, 1904, 33 L.D. 159.

8/ Case of Sadie Hawley, 1914, 43 L.D. 364.

Supplementary Legislation

In 1912 the Secretary of Interior was authorized by Congress to issue a patent to a settler upon completion of the residence, reclamation and cultivation requirements, and payments then due. ^{9/} This was an improvement in Reclamation Law because it allowed an entryman to mortgage his land for credit purposes, thereby removing an inhibiting hardship. The settler, however, was still limited to 160 acres.

Section 46 of the Omnibus Adjustment Act of 1926 requires contracts with irrigation districts to provide that irrigable lands held in private ownership by any one owner in excess of 160 irrigable acres shall not receive water unless the owner shall execute a contract for sale of the excess acreage. ^{10/} By its very nature, such a contract necessarily imposes a joint liability on all the landowners of a district. Payment in full of the joint obligation assumed by the district would be essential to effect freeing the excess land from limitation restrictions. Should the owner who has contracted with the irrigation district fail to sell the excess land within the prescribed time limit of one year, the Secretary of Interior is given power of attorney to sell the excess land at the appraised value.

^{9/} U. S. Department of Interior, Bureau of Reclamation, Federal Reclamation Laws Annotated, *op. cit.*, p. 150.

^{10/} Ibid., pp. 318-19. This was one of the recommendations of the Fact Finders Committee which was appointed by the Secretary of Interior in 1923 to study all aspects of Reclamation.

On September 24, 1948, the Acting Commissioner transmitted a memorandum from the Chief Counsel of the Bureau of Reclamation stating that it is possible for an individual landowner holding excess lands to pay in full construction charges administratively assignable to his holdings and thus free the lands of acreage limitation. However, since the purpose of Congress is controlling in determining meaning of a law, the Supreme Court ruled that "the United States is neither bound nor estopped by acts of its officers or agents in entering into an arrangement or agreement to do or cause to be done what the law does not sanction or permit." 11/ This ruling makes it very plain that where Congress has directed a course of action, as in Section 46 of the Omnibus Adjustment Act of 1926, the Secretary is bound to comply with that direction notwithstanding any policy consideration motivated either by realism or idealism. 12/ Therefore, the individual cannot release himself from the excess lands limitation restrictions until payment in full of the joint obligation is assumed by the district as a whole.

11/ U. S. - vs - C. I. O., 335 U. S. 106, 112 (1948).

12/ U. S. Department of Interior, Office of the Solicitor, Solicitor's Opinion on Kings River Contract, Memorandum, Washington, D. C.; July 10, 1957.

Proposed Modification

The evolutionary process of introducing flexibility into reclamation law has been characterized by many attempts to place a greater amount of discretionary administrative power for setting size of farm into the hands of the Secretary of Interior. The apparent disadvantage of flexibility in this form is that it would increase the pressures exerted upon the Secretary by outside interests. 13/

Exceptions and Modifications, and Circumstances Thereto

1. Boulder Canyon Project (All-American Canal, Imperial Irrigation District, California)

Provides that the 160-acre limitation does not apply to lands in the district now irrigated and having a present water right. 14/

2. Colorado--Big Thompson Project (Colorado)

Provides that the excess land provisions are not applicable to lands having an irrigation water supply from sources other than a

13/ Public Officials often relieve outside pressures by pointing to a statute in search of authority for action or inaction.

14/ Letter dated February 24, 1933 from the Secretary of the Interior, Ray Lyman Wilbur, to the Imperial Irrigation District, El Centro, California.

Federal Reclamation project and that these lands will receive a supplemental supply from the Colorado--Big Thompson Project. 15/

3. Water Conservation and Utilization Projects

Section 4 (c) (5) of this act grants authority to the Secretary of Interior to "establish the size of farm units of irrigable lands on each project in accordance with his findings of the area sufficient in size for the support of a family on lands to be irrigated."

It further provides that "no water may be delivered to or for more than the farm unit area of irrigable lands in the project owned by a single landowner." 16/ Under this authorization farm units have been established on the Eden Project, Wyoming, containing 200 irrigable acres more or less, depending upon land classes.

4. Truckee River Storage Project (Nevada--California) and

5. Humboldt Project (Nevada)

Provides that excess land provisions are not applicable to lands in Washoe County Water Conservation District, Nevada (irrigated from

15/ U. S. Congress, Senate Report 4027, 75th Congress, 3d Session; see also Department of Interior Report dated June 6, 1938 and Public Law 665, 75th Congress, 3d Session, June 16, 1938.

16/ U. S. Congress, House Report 10122, 76th Congress, 3d Session, and Ibid., House Report 2944, see also Public Law 848, 76th Congress, 3d Session, October 14, 1940.

Boca Reservoir), nor to lands in Pershing County Water Conservation District, Nevada (irrigated from the Humboldt River Reservoir). 17/

6. San Luis Valley Project (Colorado)

Provides that the excess land provisions are not applicable to lands or to ownership of lands receiving supplemental or a regulated supply of water from the San Luis Valley Project, Colorado, provided that in lieu of acreage limitations no landowner shall receive a supply greater in quantity than that reasonably necessary to irrigate 480 acres of land. 18/

7. Owl Creek Unit (MRBP, Wyoming)

Provides that the excess land provisions are not applicable to lands in the Owl Creek Unit, Missouri River Basin Project. 19/

8. Santa Maria Project (California)

Provides that Section 46 of the Omnibus Adjustment Act of May 25, 1926, which concerns contract for sale of excess acreage, and any other similar provision applicable to Santa Maria Project lands

17/ U. S. Congress, House Report 10543, see also Public Law 883, 76th Congress, 3d Session, November 29, 1940.

18/ U. S. Congress, Senate Report 2610, 82nd Congress, 2d Session and Senate Report 1594, 82nd Congress, 2d Session, May 12, 1952.

19/ U. S. Congress, Senate Report 1790, 83rd Congress, 2d Session, July 12, 1954.

does not apply so long as water utilized thereon is acquired by pumping from underground reservoirs. 20/

9. Excess lands acquired by foreclosure, etc.

Amended the previous provisions of Reclamation Law whereunder property acquired by foreclosure or other process of law, inheritance, devise, etc., could be held for only 2 years by extending the permissible period during which such property can be held to 5 years. 21/

10. Washoe Project (Nevada--California)

Section 2 (b) of Public Law 858, 84th Congress, 2d Session, dated August 1, 1956 provides that contracts for supplemental water supply (under Washoe Project) may omit provisions of the third sentence, paragraph (a) Section 46, Act of May 25, 1926 (Omnibus Adjustment Act). In lieu thereof, the contract must provide that the pro rata share of irrigation allocation attributable to furnishing irrigation benefits in each particular year to land held in private ownership by any one owner in excess of 160 irrigated acres shall be returned with interest computed in accordance with

20/ U. S. Congress, House Report 1098, 83rd Congress, 2d Session, January 7, 1954, containing Department of Interior Report on House Report 2235.

21/ U. S. Congress, House Report 1748, 84th Congress, 2d Session, February 7, 1956; see also U. S. Congress, Senate Report 2378, 84th Congress, 2d Session, June 28, 1956 and Public Law 690, 84th Congress, 2d Session, July 11, 1956.

appropriate provisions of the act. However, such payment for the excess lands shall not exceed the amount equal to the increased payment capacity of the excess lands (as determined by the Secretary) resulting from the supplemental water supply. 22/

11. Small Reclamation Projects

Section 5 (c) (2) of the aforementioned act provides for payment of interest on that pro rata share of a loan made under the act attributable to furnishing irrigation benefits in each particular year to land held in private ownership by any one owner in excess of 160 irrigable acres. 23/

12. East Bench Unit (MRBP, Montana)

Provides exemptions of Beaverhead River Valley lands from acreage limitation of Reclamation law except that ownership of bench lands alone, or a combination of bench and valley lands, in excess of 130 class I equivalent acres shall be deemed as excess under Reclamation law. We must bear in mind that the bench lands are

22/ U. S. Congress, Senate Report 1829, 84th Congress, 2d Session, April 24, 1956; see also Public Law 858, 84th Congress, 2d Session, August 1, 1956. Terms such as "pro rata share . . . attributable to furnishing irrigation benefits . . . increased payment capacity" are so ambiguous that they are being used in order to circumvent the original intent of the Reclamation Act.

23/ U. S. Congress, House Report 2200, 84th Congress, 2d Session, May 23, 1956; see also Public Law 984, 84th Congress, 2d Session, August 6, 1956. Section 5 (c) (2) has the effect of providing an economic sanction to building up land monopoly in the form of corporate agriculture on Reclamation projects.

variable in profile with the result that most farm units will be a composite of land classes I, II, and III rather than one land class exclusively.

It also provides that water may be delivered to such excess lands if (1) total ownership does not exceed 160 irrigable acres, or (2) a valid recordable contract has been executed. The exception was made because of climate, hence site conditions, and includes the equivalent of 130 acres of class I land, i.e., 130, 160, and 220 acres of classes I, II, and III lands, respectively. 24/

13. Columbia Basin Project (Washington)

Among other purposes, Public Law 85-264 increases the acreage which can be owned under the Columbia Basin Project Act to (1) one or more farm units held by an individual owner but not to exceed a total of 160 irrigable acres, or (2) one or more farm units held by a family but not to exceed 320 irrigable acres, provided that water shall not be delivered to more than one farm unit held by any individual or family on September 1, 1957, except in the case of pre-1937 owners who may hold 160 irrigable acres as heretofore provided under the Project Act. 25/ The exception was granted

24/ U. S. Congress, Senate Report 574, 85th Congress, 1st Session, July 2, 1957; see also Public Law 85-112, July 24, 1957.

25/ U. S. Congress, House Report 1238, Conference Report on Senate Report 1482, 85th Congress, 1st Session, August 23, 1957; see also Public Law 85-264, September 2, 1957.

because the original Columbia Basin Project Act was planned during the depression (1930's) and was based upon a subsistence agriculture.

14. Kendrick Project (Wyoming)

Provides that the acreage limitation applicable to the Kendrick Project shall be 480 irrigable acres in lieu of 160 as provided under basic Reclamation law. 26/

15. Seedskadee Project (Wyoming)

Prohibits delivery of water to lands in single ownership in excess of 160 acres of class I lands unless the owner of excess lands executes a recordable contract to dispose of the excess holdings. It also provides a formula for determining the "equivalent of 160 acres of class I land," i.e., 182, 225, and 372 acres of classes II, III, and IV land, respectively. 27/

16. Mercedes Division of the Lower Rio Grande Rehabilitation Project (Texas)

Provides that interest is to be paid on the pro rata share of the capital cost attributable to furnishing benefits in each

26/ U. S. Congress, Senate Report 838 on Senate Report 1996, 85th Congress, 1st Session, August 8, 1957, containing Department of Interior Report on Senate Report 1996, see also Public Law 85-283, September 4, 1957.

27/ U. S. Congress, Senate Report 1906, 85th Congress, 2d Session, July 23, 1958.

particular year to land held in private ownership by any one owner in excess of 160 irrigable acres. 28/

17. Administrative Tolerance to Violations of the 160-Acre Rule

On many projects administrators tolerate violation of the excess land rule so long as violation is in the letter rather than the spirit of the law. This is to say that some excess farms are operated by settlers who have large families, some members of which (in all probability) will share in the operation of and tend to absorb the excess acreage upon reaching the age of majority.

Basic Arguments for Exceptions

The arguments generally advanced in support of the various exceptions to and modifications of the 160-acre rule are:

1. That the basic Reclamation Law was intended for public, not private land.
2. That Reclamation was designed to supply water for newly-developed lands, not supplemental water for previously-developed lands.
3. That the particular project differs in some aspect in regard to site such as length of growing season, soil conditions and/or location with respect to markets.

28/ U. S. Congress, Public Law 85-370, 72 Statute 82, April 7, 1958.

4. That the communities were already established, therefore the incremental value would be small.
5. That interest will be paid on the public monies invested in excess lands.

Circumvention of Rule

Because of the tendency toward inflexibility in the 160-acre limitation, various methods have been devised with which to circumvent the basic rule. One of the most popular of these is the "money alternative," i.e., payment in full of construction charges so that patent for the land will be issued and the land reverts to a private status. This method is used in connection with public land upon which the Secretary of Interior has the prerogative of setting farm sizes at less than 160 acres, i.e., from 40 to 160 acres. Reversion from public to private land through patent allows increased land ownership up to 160 acres--the size of farm initially set on private land. The exception to the rule setting farm size on private land is the Columbia Basin Project wherein the Secretary of Interior is required to establish farm units on a family farm concept and may establish the unit at less than 160 acres. Less popular is the second method of putting pressure on the Army Engineers to add irrigation to their present navigation and flood control powers. 29/

29/ This method requires pressure in the form of lobby action in Congress on particular projects which have multiple use possibilities.

The Army Engineers are not bound by the 160-acre rule. The third and least popular of the methods in circumvention is that of having the individual state take over and pay the entire cost of the project. ^{30/} A very popular proposal for circumvention is the so called Engle formula which would consist of an interest charge on excess land holders in lieu of requiring disposal of the excess holdings in return for water.

Need for Research

The great number of exceptions, modifications, waivers, special provisions, and administrative tolerance to deviations with respect to acreage limitation in reclamation indicates maladjustment in the organization of land resources resulting from restrictions imposed by the 160-acre rule. These circumstances make it necessary to determine whether the rule allows secular adjustment to improvements, technological change, and changes in demand. Information is needed concerning the effect of alternatives in size, both for legislative purposes and from the occupational standpoint.

^{30/} Proves to be much too costly for most states. An example in process, however, is the State's Feather River Project in California's Central Valley Watershed.

III. STUDY AREAS--SETTING AND PRESENT STATUS

Since the economic problem of too small farms on irrigated projects is most severe where high altitude and the associated short and cool growing seasons limit the basic cropping pattern to small grains, hay, and pasture, it is intended to concentrate this study on areas of such limited alternatives. These are the proposed East Bench Unit of the Missouri River Basin and the Greenfields Division of the Sun River Project with mean altitudes of 5,100 and 4,000 feet respectively. However, for comparison purposes and to point out the general problem, two areas of more intensive agriculture will also be studied. These are the Huntley Project and Heart Mountain Division of the Shoshone Reclamation Project with mean altitudes of 2,850 and 4,700 feet respectively.

For purposes of simplicity throughout the remaining text, the Greenfields Division of the Sun River Project and the Heart Mountain Division of the Shoshone Project will be termed the Greenfields Division and the Heart Mountain Division, respectively.

East Bench Unit

The proposed East Bench Reclamation Unit lies in the valley of the Beaverhead River in Beaverhead and Madison Counties near Dillon, Montana. It extends from the proposed Clark Canyon Dam near Armstead, Montana northeast 40 miles to near Twin Bridges, as shown on the following page in Figure I. Elevations within the area range from 5,450 at the proposed Clark Canyon Dam to 4,700 feet at its northeast point.

