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An Agricultural Law Research Article

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by

Robert E. Beck & Richard A. Newgren

Originally published in NORTH DAKOTA LAW REVIEW 44 N.D. L. REV. 465 (1968)

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IRRIGATION IN NORTH DAKOTA THROUGH GARRISON DIVERSION:

AN INSTITUTIONAL OVERVIEW*

BY ROBERT E. BECK** AND RICHARD A. NEWGREN***

The Garrison Diversion Unit of the Missouri River Basin project, a vast and complicated undertaking, is a multi-purpose project¹ that will affect much of central and eastern North Dakota. Although the unit was originally authorized in 1944,² construction did not begin³ until it had been thoroughly reviewed and reauthorized, a process not completed until August 5, 1965.⁴ Under this reauthorization, the federal government working through the Department of the Interior, will supply the initial financial investment necessary to build the dams, canals, drains, and other facilities, and to provide the equipment, needed to bring water from the Missouri River

[•] This article is part of a study of North Dakota (and regional) water law sponsored by the Economic Research Service, United States Department of Agriculture. The study is to be completed by June 30, 1968.

The authors wish to express their sincere thanks and appreciation to Mr. Vernon S. Cooper, Manager, Garrison Diversion Conservancy District, for his generous contributions to this initial study.

^{**} Associate Professor of Law and Director, Agricultural Law Research Program, University of North Dakota Law School. LL.B. University of Minnesota, LL.M. New York University.

^{***} Research Associate, Summer 1967, University of North Dakota Law School. B.A. University of Minnesota Duluth.

^{1. &}quot;... providing for the irrigation of two hundred and fifty thousand acres, municipal and industrial water, fish and wildlife conservation and development, recreation, flood control, and other project purposes" and to "be prosecuted by the Department of the Interior substantially in accordance with the plans set out in the Bureau of Reclamation report dated November 1962 (revised February 1965) supplemented report to said House Document Numbered 325." 79 Stat. 433, 433 (1965). (Navigation and electrical power generation will also be involved.)

^{2. 58} Stat. 887, 891; see H.R. Doc. No. 325, 86th Cong., 2d Sess. VIII (1960) which states: "The Garrison Diversion Unit is a modification of the plan for irrigating lands in North and South Dakota which was authorized by virtue of its inclusion in this Department's report on the Missouri River Basin Project (S. Doc. 191, 78th Cong.) as the Missouri-Souri-Souris Unit. More detailed investigations subsequent to authorization of the project by the Flood Control Act of December 22, 1944, have revealed opportunities for more effective and efficient service by modifying the plan of development as outlined herein."

^{3.} Apparently the project officially began in July of 1967 with the placing of an order for "three large water pumps and motors to be completed in 1971." 54 RECLAMATION ERA 9 (Feb. 1968). Garrison Dam, located approximately seventy miles north of Bismarck, is already in existence, resulting in the creation of Garrison Reservoir. Since the diversion will come from this body of water it is referred to as the Garrison Diversion Project.

to the various areas within the Garrison Unit where it will be used for irrigation and other project purposes.

To facilitate development of this federally financed Diversion Unit the North Dakota State Engineer approved the application of the Bureau of Reclamation for a water permit to appropriate nearly 3.2 million acre feet of water from the Missouri River annually.⁵ This water will be used primarily for irrigation, and irrigation will be the primary subject of this article. Other aspects of the unit will be examined only to the extent necessary to give a basic understanding of the project or to the extent that they contribute to irrigation by making the project itself possible.

Since this is an institutional survey of the Garrison Unit the discussion will be divided along institutional lines. Obviously the different aspects to be discussed herein are interrelated, but it still seems best to have a series of separate discussions. The Garrison Diversion Unit irrigation operation is divided into two separate parts-(1) the supply system, which consists of the main canals, pumping plants and reservoirs required to convey water from Garrison Reservoir to various points throughout the project area where it can be utilized to serve a specific area or use, and (2) a series of distribution systems which will convey water from the terminal facility of the supply system to specific irrigable lands.⁶ The primary operating or functional tools for carrying out the irrigation operations of the Garrison Unit will be the Garrison Diversion Conservancy District and a number of irrigation districts. The Conservancy District will be responsible for the supply system and the irrigation districts for the distribution systems. The institutional structure of these districts will be considered first. The Conservancy District and the various irrigation districts will be able to carry out their irrigation function only through contracts with the federal government, the chief initial investor in the project. There are two basic contracts, (1) a master contract between the federal government and the Garrison Diversion Conservancy District and (2) a three-way contract among the federal government, the Gar-

 ^{4. 79} Stat. 433 (1965). For an informative 228 page analysis see H.R. Doc. No. 325, 86th Cong., 2d Session (1960), A Report on the Garrison Diversion Unit, North Dakota and South Dakota, Missouri River Basin Project.
 5. State Water Conservation Commission, Permit No. 1416, issued pursuant to N.D. CENT. CODE ch. 61-04 (1960). The exact figure requested and granted was 3,145,000 acrefect. The permit provides that this is subject to "prior water permits," and that "the acrefect and rate of withdrawal are subject to madification by the State." "If the permit is a subject to acredit the state of the state of the state of the state." feet and rate of withdrawal are subject to modification by the State Engineer." The permit also authorizes the diversion, within limitations, of waste, seepage and return flow resulting from the use of this water. Such waters may enter and be diverted from the Souris, Sheyenne and James Rivers.

souris, Sneyenne and James Rivers. 6. See note 41 *infra. See also* United States Department of the Interior, Bureau of Reclamation, Master Contract between the United States and the Garrison Diversion Conservancy District for the Garrison Diversion Unit, Missouri River Basin Project, art. 4 (Jan. 26, 1966) (hereafter referred to as Master Contract) and Contract among the United States, the Garrison Conservancy District, and the James River Irrigation Dis-trict (May 1, 1966) art. 7 (hereafter referred to as James River Contract.)

rison Diversion Conservancy District and a particular irrigation district. The article will therefore next explore the contracts, concentrating on four significant aspects: (1) repayment, (2) operation and maintenance, (3) fiscal agency, and (4) the 160 acre limitation. Then will follow a short evaluation and conclusion.

I. GARRISON DIVERSION CONSERVANCY DISTRICT

In 1955 the North Dakota legislature authorized creation of the Garrison Diversion Conservancy District.⁷ It is the overall legal entity concerned with the development and operation of the Garrison Diversion unit in North Dakota and serves as a coordinating body for all project purposes and interests. But because irrigation is the principal purpose of the Garrison Diversion Unit, the District's primary concern relates to this function. It will be directly responsible for the operation of the project supply system, and it will have some involvement in the operation of the various irrigation distribution systems of the project. An important District function will be to act as fiscal agent for the federal government in collecting water charges from the various irrigation districts and other water user organizations. In pursuance of the various purposes, it has helped to organize the various irrigation districts; it has worked on the plans for the project; and it has helped to draw up the necessary three-way contracts between the federal government, the irrigation districts, and itself. Further, it has acted as a liaison between the other agencies that are involved in the project.

The District has the fairly standard powers to sue and be sued, to use the power of eminent domain, to accept funds and assistance from various state and federal agencies, and to contract generally for the fulfillment of its purposes, including contracts with the federal government and other agencies. Naturally, then, it has the power to sell, lease, or otherwise contract for the disposition of water not only to irrigation districts but to individuals and other entities.⁸

Although the legislature specifically included the entire area of only those twenty-two counties⁹ of the state that were apt to receive substantial benefits¹⁰ from the unit, it did provide that

N.D. Sess. Laws 1955. See also N.D. CENT. CODE ch. 61-24 (1960). (The 1955 legislation supercedes Sess. Laws 1949, Ch. 347 which had created the Missouri-Souris Conservancy and Reclamation District.) The discussion that follows in the text draws substantially from the code provisions in this chapter without referring to each individual section, except in several particulars.
 8. The Master Contract uses the term "C-District Contractor" and defines it as fol-

^{8.} The Master Contract uses the term "C-District Contractor" and defines it as follows in Art. 1 (j): " \dots any irrigation district, municipality, individual, or other entity which enters into a long-term water supply contract after such contract has been approved as to form and terms by the Contracting Officer."

^{9.} Barnes, Benson, Bottineau, Cass, Dickey, Eddy, Foster, Grand Forks, Griggs, La-Moure, McHenry, McLean, Nelson, Pierce, Ramsey, Ransom, Renville, Sargent, Sheridan, Stutsman, Ward, and Wells. N.D. CENT. CODE § 61-24-02.

^{10.} Indirect benefits can be elusive and not easily pinned down. Indirect benefits clear-

any county adjoining the district and not included by name could be included if that county's board of county commissioners applied and the District's Board of Directors approved the application. Three counties have been added to the District under this provision;¹¹ making a total of twenty-five. These three counties apparently felt that they could share more fully in the project benefits by joining the District. Further, the Legislature has provided a method whereby any County in the District not benefited or not to be benefited, in whole or in part, by the establishment of the Garrison Diversion Unit may be excluded from the District.¹² The board of county commissioners would have to file a petition with the Conservancy District requesting their county be excluded and if the District Board found that the county would not be bene-

1. The profits of local wholesalers and retailers from handling increased sales of farm products consumed locally off the project without processing.

2. Profits of all other enterprises between the farm and the final consumer, from handling, processing and marketing increased sales of farm products locally and elsewhere.

Profits of all enterprises from supplying goods and services for increased farm purchases for family living allowance and production expenses.

Public irrigation benefits comprise the increase or improvement in settlement opportunities, investment opportunities, community facilities and services, and stabilization of local and regional economy. Provision of opportunities for the establishment of fam-ily-sized farms through irrigation development is a national policy for improving the general welfare. Direct and indirect benefits to farmers and businessmen do not completely represent the national benefits resulting from new settlement opportunities.

The following excerpts from an address by Thor A. Hertsgaard, North Dakota Re-sources Research Institute and Department of Agricultural Economics, North Dakota State University, Fargo, North Dakota, at the Water Resources Conference, in Winni-peg, Canada, Dec. 8-9, 1967 should be helpful in understanding how these indirect benefits arise:

"The basic notion of input-output analysis is that an expanded level of output in one of the sectors (such as agriculture) will require more inputs in that sector which must be supplied by other sectors (such as the agricultural implement sector). Increased purchases by agriculture from other sectors will, in turn, require those sectors to purchase more inputs from other sectors who will then require more inputs from still other sectors, etc. This spending and respending of income within the economy of income that results in one sector gives rise to a 'multiplier' effect in which the original income change in one sector may generate a total increase in income in the whole economy that is several times that of the income change in the initial sector." Address by Thor A. Hertsgaard, Water Resources Conference, Dec. 8-9, 1967, p. 1.

"The results of this study can be used to estimate the income changes that are likely in the respective sectors of an economy as a consequence of irrigation development (and other kinds of development) in an area. Pre-liminary indications are that each dollar of additional income to the crop producing sector would result in a total income increase within the area of about three dollars. This would consist of the initial dollar of direct income to the crop producing sector plus an additional income of about two dollars of indirect income to the respective sectors of the ocal economy that is generated as a consequence of increased output of the crop producing sector." Id. at 9.

11. Richland, Steele and Traill pursuant to N.D. CENT. CODE § 61-24-02. See In re Garrison Diversion Conservancy District, 144 N.W.2d 82, 87 (N.D. 1966).

ly are contemplated in the Garrison Project; their focus is economic. See H.R. Doc. No. 325, 86th Cong., 2d Sess. 59 (1960) which states; "Indirect farm benefits result from increased farm sales and purchases due to irrigation development Indirect benefits represent:

^{12.} N.D. CENT. CODE § 61-24-16 (1960).

fited by the Unit the District Board would have to exclude them. No counties have so petitioned.

The affairs of the District are to be run by a Board of Directors.13 This Board consists of one Director from each of the twentyfive member counties. This Director is elected for a four year term by the voters of the county that he represents. The initial legislation provided that the Director for each county was to be appointed by the respective board of county commissioners.¹⁴ This procedure was changed because of a serious question as to the legality of a tax levy being made by an appointive board.¹⁵ And the District had been given the power to make up to a one mill levy on all of the lands within the District.¹⁶ In dealing with the many phases of the Garrison unit, the Board is empowered to appoint committees to aid it in its work. Five standing committees have been created to date: Executive; Project Planning; Public Relations: Contract: and Recreation. The committee titles indicate fairly well their respective functions. Further, the Board is empowered to employ whomever it deems necessary to carry out the business of the district.

II. IRRIGATION DISTRICTS

In 1917 the North Dakota legislature authorized the creation of

This case is first distinguished in Solich v. Board of Drain Commissioners, 17 N.D. 393, 117 N.W. 125 (1908) on the basis that it relates only to the general taxing power and not to the levying of special assessments by an appointive body, a board of drain commissioners.

In Scott v. Donnelly, 133 N.W.2d 418 (N.D. 1965) Vallelly is again distinguished, this time on the basis, (1) that it involved a local government whereas Soott involves the North Dakota Potato Development Commission, not a local government or political sub-division, and (2) that Vallelly involved general taxes assessed on property, whereas Scott involves excise taxes.

16. N.D. CENT. CODE § 61-24-08(9) (1960). "... for the payment of the district, including but not limited to, *per diem*, mileage and other expenses of directors, technical, administrative, clerical, operating and other expenses of the district office, and for the cumulation of a continuing fund through such levy for the performance of obligations entered into with the United States of America in connection with the Constitution of a continuing of the states of the state of America in connection with the construction, operation and maintenance of works of the said Garrison Diversion Unit of the Missouri River Basin Project." See Also N.D. CENT. CODE § 61-24-09.

^{13.} See generally N.D. CENT. CODE §§ 61-24-03 thru 61-24-09 (1960). 14. N.D. CENT. CODE § 61-24-03 (1943) revised in 1959 by N.D. Sess. Laws 1959, Ch. 412 as inserted in N.D. CENT. CODE § 61-24-03 (1960). 15. Vallelly v. Grand Forks, 16 N.D. 25, 111 N.W. 615 (1907). In this case the court held legislation which delegated general taxing powers to a park board whose members were appointed by the city council rather than elected by the people to be unconstitutional. The court reasoned in part this way: "It has become a well-recognized principle of constitutional law that local boards and councils elected by the people are bodies to which the power to tax may be delegated. This is so upon the principle that the legisla-tive power to levy taxes rests with the people; and, so long as the people have a voice tive power to levy taxes rests with the people; and, so long as the people nave a voice in the selection of bodies to which the power to tax is delegated, the constitutional re-striction is not violated. The power of the legislature to delegate the authority to levy taxes is generally held to be limited to boards or councils elected by the people, and is not sanctioned when delegated to those appointed, when the appointment has not been assented to by a vote of the people. This limitation is recognized under the principle that all powers of taxation are, to be approved by the people, and unless the people as-sent by vote to the appointment or election of the taxing suthorizing sent by vote to the appointment or election of the taxing authorities, the law authorizing such powers of taxation to those not thus assented to is repugnant to the Constitution, and not to be upheld. 16 N.D. 25, 32, 111 N.W. 615, 618 (1907).

an irrigation district "in any district susceptible of one mode of irrigation from a common source and by the same system of works."¹⁷ Obviously this legislation predates the Garrison project, but it will be irrigation districts organized under this law as it has been amended¹⁸ whose duty it will be to undertake the operation of the irrigation distribution systems and to whom the individual irrigators will generally look for their water. The irrigation districts have many basic powers and duties similar to those of the Conservancy District, but while the Conservancy District has responsibilities relating to all project purposes and to the entire geographic area involved, the irrigation districts are concerned primarily with the irrigation of a specific limited area and the distribution system built to serve that area. Their source of revenue will be special assessments levied against lands benefited by the irrigation systems.¹⁹

Subject to various statutory restrictions, whenever a majority of "electors"²⁰ within an area that contains eighty acres or more of irrigable land want to form an irrigation district they may file a petition to that effect with the state engineer.²¹ After investigation and hearing the state engineer makes a determination whether the proposed establishment is "advisable" and whether the irrigation proposal is "practicable and economically sound."²² If he approves the petition he may call an election on the question of the establishment of the district, and if a majority of the votes cast in the election approve, the district is to be declared organized. Eleven irrigation districts have been organized within the Garrison unit.²³ They will be able to provide landowners with Garrison irrigation water by contracting with the federal government for an

21. See generally N.D. CENT. CODE Ch. 61-05 (1960) entitled: "Organization of Irrigation Districts."

22. N.D. CENT. CODE § 61-05-13 (1960).

^{17.} N.D. Sess. Laws 1917, Ch. 115.

^{18.} N.D. CENT. CODE Ch. 61-05 thru 61-11 (1960) (Thus irrigation districts may well exist which will have no relationship to the Garrison Project.)

^{19.} N.D. CENT, CODE Ch. 61-09 (1960).

^{20. &}quot;'Elector' shall mean any landowner owning not less than five acres of land whose land will be or is subject to assessments for construction or other costs within a proposed or existing irrigation district, and who is a resident of this state. As herein used the term 'owner' shall include a) an entryman of government lands; b) a purchaser of land under contract; c) a guardian, executor, administrator, or trustee; d) a corporation organized and existing under the laws of this state; and e) the United States of America and the state of North Dakota." N.D. CENT. CODE § 61-05-01 (1) (1960).

^{23.} Dickey-Sargent Irrigation District (Dickey and Sargent Counties); Harvey Pumping Irrigation District (Wells County); James River Irrigation District (Stutsman, LaMoure and Dickey Counties); Karlsruhe Irrigation District (McHenry County); Lincoin Valley Irrigation District (Sheridan County); Middle Souris Irrigation District (McHenry, Renville, Bottineau and Ward Counties); Mouse River Irrigation District (McHenry County); New Rockford Irrigation District (Eddy County); North Souris Irrigation District (Bottineau County); Tri-County Irrigation District (Cass, Ransom and Richland Counties); and Warwick-McVille Irrigation District (Nelson, Benson, Eddy and Ramsey Counties.)

irrigation distribution system and with the Conservancy District concerning certain specific matters.

To date, there exists a master contract between the Conservancy District and the federal government²⁴ relating to the Garrison Diversion unit supply system and four "three-way"²⁵ contracts relating to irrigation district distribution systems. "Three-way" refers simply to the fact that there are three parties to those contracts, the federal government, the Conservancy District, and an irrigation district. A separate contract is drawn up for each irrigation district, but the variations between the different three-way contracts relate only to the rate used to determine the repayment amount and the description of the district supply system.

According to the terms of the Master Contract, the federal government would not begin building the supply works and distribution systems until a sufficient number of three-way contracts had been negotiated with irrigation districts to insure enough acre coverage for an "economical and feasible operation of the water supply and distribution works."²⁶ A figure of approximately 100,000 irrigable acres was chosen,27 and the four irrigation districts which have entered into contracts contain acreage in excess of this amount.

It is unlikely that any more irrigation districts will be formed for the 250,000 acre initial phase²⁸ of the Garrison Diversion project, but twenty to twenty-five such districts will probably be formed for the entire million acre project.²⁹ Future contracts are expected to follow the pattern of the previous contracts. The operation of the Garrison unit cannot be understood unless one has some knowledge of some of the provisions of these contracts. They are long and probably necessarily complicated³⁰ because of the nature and manner of construction and operation of the project. It would be beyond the scope of this initial study to attempt to cover all of

See note 1, supra.
 Garrison Manager Interview, Aug. 22, 1967.

^{24.} Master Contract, supra n. 6.

^{25. 1)} Contract among the United States, the Garrison Conservancy District, and the Dickey-Sargent Irrigation District (Mar. 1, 1966). 2) Contract among the United States, the Garrison Conservancy District, and the

James River Irrigation District (Mar. 1, 1966).

³⁾ Contract among the United States, The Garrison Conservancy District, and the Warwick-McVille Irrigation District (Mar. 1, 1966).
4) Contract among the United States, the Garrison Conservancy District, and the Lincoln Valley Irrigation District (Mar. 2, 1966).

^{26.} James River Contract, Art. 5(b). See also Master Contract, Art. 2(b).

^{27.} Interview with Manager of the Garrison Conservancy District, in Carrington, North Dakota, June 30, 1967 (hereafter referred to as Garrison Manager Interview). See also In re Garrison Diversion Conservancy District, 144 N.W.2d 82, 86 (N.D. 1966).

^{30.} The Master Contract consists of a twenty-four page booklet of small print together with three pages of exhibits and containing forty-three articles and divided into three parts: "Water Service"; "Recreation, Fish and Wildlife"; and "General Provisions." The James River Contract consists of a twenty-one page booklet of small print con-taining thirty-three articles with major sections on "General Definitions," "Furnishing of Water," "Construction of Distribution Works," "Operation and Maintenance of Works," "Payments," and "General Provisions."

the provisions, but an attempt will be made to give some understanding of the provisions concerning the major aspects of the project.

III. THE CONTRACTS

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Obviously federal reclamation legislation contains much detail,³¹ and the contracts cannot vary the law, but must set it forth. It is not the purpose of this article to indicate in painstaking detail which contract provisions are merely a reiteration of federal legislation and which are provisions that have been formulated by the Secretary of the Interior or through actual negotiations among the parties.

The federal government insisted on a provision in the master contract requiring court confirmation of "the proceedings had for the organization of C-District [Garrison Diversion Conservancy District] and the proceedings of the governing board of C-District leading up to and including the making of this contract and the validity of the provisions thereof."³² Almost identical provisions in the irrigation district contracts merely substitute "I-District" [Irrigation District] for "C-District."33 Apparently all of this confirming was accomplished in a 1966 opinion of the North Dakota Supreme Court;³⁴ but this is not entirely clear, for the specific questions dealt with by the court relate only to the Garrison Diversion Conservancy District. However, in the court's statement of the facts it indicates that the district court had been asked to confirm not only the proceedings preliminary and incident to the making of the master contract, but preliminary and incident to the making of the irrigation district contracts also. But the Supreme Court then said only that "the proceedings taken by the Garrison Diversion Conservancy District were reviewed and approved by the District Court."³⁵ It may simply be that there were not considered to be any serious questions concerning the irrigation districts and that therefore they were all resolved finally by the district court, whereas serious questions were raised with reference to the Garrison District which were then certified to the Supreme Court. Such confirmation will not necessarily remove or resolve any ambiguities or fill any gaps that may exist in the contracts, but it should preclude

^{31.} See generally, 43 U.S.C.A. ch. 12 (This chapter includes 226 pages of specific statutory provisions and case annotations.)

Master Contract, Art. 32(a).
 33. James River Contract, Art 27(a).

^{34.} In re Garrison Diversion Conservancy District, 144 N.W.2d 82 (N.D. 1966). Ju-dicial confirmation is authorized in N.D. CENT. CODE §§ 61-07-22 thru 61-07-27 and § 61-24-15 (1965). Review by the North Dakota Supreme Court is certified pursuant to N.D. CENT. CODE ch. 32-24 (1965).

^{35.} In re Garrison Diversion Conservancy District, 144 N.W.2d 82, 85 (N.D. 1966).

the possibility of a later challenge of the contracts on the basis that they were not properly entered into or on the basis that the provisions they contain are not valid under North Dakota law.

Turning now to specific areas dealt with by the contracts we will consider first the subject of repayment.

A. Repayment

The Garrison project is designed to benefit not only the irrigator but the public at large. The various public interests are represented by federal and state agencies which must work in close cooperation so that all of the public interests can be served and competing ones effectively balanced. Such federal agencies as the Bureau of Reclamation, Fish and Wildlife Service, Soil Conservation Service, Forest Service, Bureau of Outdoor Recreation, Geological Survey, and others and their corresponding state counterparts, particularly the State Water Commission, are all involved in the project.

Each of these agencies has somewhat different interests and there are areas of conflict. The Soil Conservation Service, for example, may have a vital interest in getting irrigation for the farmer, while the dams and other facilities necessary for irrigation, but which may destroy many wildlife areas, may not seem like such a blessing to the Fish and Wildlife Service.³⁶ In most instances such potential or actual conflicts can be worked out to the benefit of everyone concerned,³⁷ but it requires close cooperation and an understanding of the problems involved. Even where their interests do not conflict, the different agencies must work together closely in order that the public may reap the maximum benefit possible.

The Garrison project is an example of co-operative effort. It is projected that there will be thirty-six major areas and thirty minor areas devoted to fish and wildlife purposes; fourteen cities and towns and four industrial areas will be supplied with water for domestic and industrial needs; additional electric power, flood control, and stream improvement is foreseen; and many new recreation areas will be created. The project may also restore Devils and Stump Lakes³⁸ to pre-existing levels so that they will be usable for fishing and other recreation purposes once again. At present they are not usable for either purpose due to their high

^{36.} See H.R. Doc. No. 325, 86th Cong. 2d Sess. 89 (1960) that contains a 112 page analysis and report: Study of the Effects of the Bureau of Reclamation Plan on Fish and Widlife Resources, and a Plan of Development for Fish and Widlife.

^{37.} In each instance one purpose will probably be the major one and the benefits for other purposes can be treated only from the standpoint of maximizing them as much as possible while still carrying out the major purpose. With Garrison, irrigation would be the major purpose. There are, of course, areas in the country where fish and wildlife purposes are and must be the major purpose.

^{88.} Some possible legal impediments have already been cleared away. See Rutten v. State, 93 N.W.2d 796 (N.D. 1958).

salt content. The proposal is to flush them out and stabilize their levels by diverting water through them.

The amounts that the various benefactors of the project will repay toward the construction costs³⁹ vary greatly. Some of the costs, such as those allocated to flood control, are not reimbursable, while other costs, such as those allocated to fish and wildlife and to recreation are only partially reimbursable. The costs allocated to irrigation are totally reimbursable. And of the total reimbursable costs, over ninety percent has been allocated to irrigation. However, the irrigators will repay only about ten percent of the costs allocated to irrigation; power revenues will pay the balance of the cost allocated to irrigation.⁴⁰ If the irrigators had to pay the full share of the allocated cost, they would never be able to finance the project. The irrigator will pay to the extent of his ability, and power-the "paying partner of irrigation"-will finance the rest of the irrigation allocation as well as its own allocated costs. Municipal and industrial water use, fish and wildlife, recreation and power are assigned almost all of the remaining ten percent of the reimbursable costs, all of which will be repaid by the

39. U.S. DEP'T OF THE INTERIOR, BUREAU OF RECLAMATION, REGION VI,	SUPPLEMENTAL
REPORT ON GARRISON DIVERSION UNIT (Initial stage-250,000 acres) (No	v. 1962) (Re-
vised Feb. 1965), sets forth the following:	
Table 18. Summary of costs and repayment allocations	
Garrison Diversion Unit, first stage-250,000 acres	
Total estimated project cost	\$249,148,000
Allocation of costs	
Reimbursable costa	
Irrigation	198,578,000
Municipal and industrial water	12,921,000
Recreation	1,836,000
Fish and Wildlife	1,097,000
Power	38,000
Subtotal	213,970,000
Nonreimbursable costs	
Fish and Wildlife	20,612,000
Recreation	11,758,000
Flood Control	2,818,000
Subtotal	35,178,000
Total	249,148,000
Repayment of reimbursable irrigation costs	
From irrigation water users	15,546,000
From Garrison Conservancy District	3,750,000
Subtotal	19,296.000
From surplus power revenues—Missouri River Basin Project	179,282,000
Total	198,578,000
Repayment of reimbursable municipal and industrial water costs from	
municipal and industrial users	12,921.000
Repayment of Recreation and Fish and Wildlife Costs	
from Garrison Conservancy District	2,423,000
Repayment of reimbursable power costs	
From surplus power revenues—Missouri River Basin	
Project	38,000
Total repayment of reimbursable costs	213,970,000
(Footnotes Omitted)	

40. The foregoing table shows that of \$198,578,000 ln reimbursable irrigation costs surplus power revenues will pay \$179,282,00.

municipal and industrial water users, power or the conservancy district.

As indicated earlier, the Garrison Diversion unit irrigation operation is divided into two separate parts - (1) the supply system, which consists of the main canals, pumping plants and reservoirs required to convey water from Garrison Reservoir to various points throughout the project area where it can be utilized to serve a specific area or use, and (2) a series of distribution systems which will convey water from the terminal facility of the supply system to specific irrigable lands. Any problems that might have arisen in determining what belongs to the supply works system and what belongs to the distribution works system has been handled in the three-way contracts by specifically setting forth that portion of the supply works necessary to convey water to the irrigation district distribution system. The rest of the facilities constructed for that district make up the distribution works system.⁴¹ The former phase is to be carried out under the direct auspices of the Conservancy District, the latter under the direct auspices of the individual irrigation districts.

The Master Contract calls for the payment to the federal government of a "water service charge," a part of which consists of a particular share of the costs of the supply works.⁴² This charge is to be paid "each year of the 40-year water service period" under the contract.⁴³ Under the contract the federal government is to

41. E.g. James River Contract, Art. 1 55 g, h. (g) "Water supply works' shall include the following facilities with their ap-
purtenant works:
(1) Snake Creek Pumping Plant and intake channel and associated
facilities;
(2) McClusky Canal;
(8) Lonetree Dam and Reservoir, including Wintering Dam and
Seepage Pumping Plant and James River Dike;
(4) James River channel between Lonetree Reservoir and Hamburg
Diversion Dam;
(5) Hamburg Diversion Dam;
(6) James River Feeder Canal;
(7) James River channel between the James River Feeder Canal and
Jamestown Reservoir;
(8) Jamestown Dam and Reservoir;
(9) James River channel between Jamestown Reservoir and Pumping
Plant No. 12 of the LaMoure Section; or other such facilities as may be
constructed in substitution therefor to serve the same purpose, as determined
by the Contracting Officer after consultation with both C-District and
I-District.
The Corps of Engineers is constructing and will operate and maintain storage
facilities on the main stem of the Missouri River which will be used to furnish a
water supply to the Garrison Diversion Unit. All of the foregoing facilities are needed
to furnish water to the Southern Operating Division."
(h) "'Distribution works' shall mean all canals, laterals, drains, pumping
plants, reservoirs and associated irrigation facilities, other than those listed in
subarticle (g), which the Contracting Officer finds necessary to furnish water to lands
of the service area, and to dispose of surplus of waste water."
42. Master Contract, Art. 11.
43. Master Contract, Art. 11(a). Art. 2(a) provides for when the contract becomes
effective: "This contract shall become effective upon its execution and shall remain
in effect for a period of forty (40) years beginning with the year in which water

be repaid on the basis of fifty cents an acre for each irrigable acre within the service areas for which three-way contracts are in force and which have no development period44 or who have completed their development period under a three-way contract.⁴⁵ In turn the irrigation district will pay the Garrison District a "water service charge" which will contain a "construction component for water supply works" of twenty cents for each acre of their irrigable land and for each "missing acre"46 for which an inclusion application has been filed.⁴⁷ Thus it is not intended that the owner of irrigable land will pay all of the cost of the supply works.

The Conservancy District's ability to make up to a one mill levy on all property within the District, provides a means whereby those who are benefitted indirectly by irrigation and other purposes of the project will share in the costs. A primary example of indirect benefits would be the increased trade and business resulting from increased wealth produced by irrigation. It is estimated that over ninety percent of the District's mill levy will be paid by indirect beneficiaries of the project.⁴⁸ The District will use part of this revenue to pay a portion of the cost of the supply works.

The distribution systems to be built by the federal government for the various irrigation service areas will serve specific landsthose lands located in the irrigation service area and which are classed as irrigable under Bureau of Reclamation investigations and surveys. The three-way contracts set forth the manner in which these systems will be constructed and operated, how repayment for their cost is to be made to the United States, and the relationship between the Conservancy District and the irrigation district in connection therewith.

The amount that the irrigation district is scheduled to "repay" to the federal government for the construction of the distribution system is based on an economic determination of the ability of

becomes available in accordance with the first announcement of water availability. .". Art.1 (1) defines: " 'Announcement of water availability' shall mean the notice which the Contracting Officer issues to C-District by March 15 of the year preceding the year in which he has determined after consultation with C-District the construction of the supply and distribution works will have so far proceeded as to permit furnished of water to satisfy C-District's contractual obligation to furnish water to any of the C-District contractors."

^{the c-District contractors."} The contract is renewable. Art. 2(a).
44. James River Contract, Art. 1(m): "Development period' shall mean the tenyear period beginning with the year when the distribution works are so far completed and water is available pursuant to the master contract so as to permit the irrigation of substantially all the lands in the District area, all as determined and anounced by the Contracting Officer on or before March 15 of the year preceding after consulting with both C-District and I-District."
45 Master Contract Art 11(b) (2)

^{45.} Master Contract, Art. 11(b) (2).
46. James River Contract, Art. 1(k): "'Missing acres' shall mean irrigable acres which, at one particular time, are within the service area but not within the district area."
47. E.g. James River Contract, Art. 11 (b) (4).
48. Garrison Manager Interview, Aug. 22, 1967.

the irrigable land in the district to pay for irrigation costs.⁴⁹ Irrigable land is placed into one of three classes with class one land the best suited for irrigation, class two the next, and then class three. Class one has the highest payment capacity and class three has the lowest. In addition, the Garrison Diversion unit is divided into three economic areas-northern, central, and southern-with a separate set of payment capacity figures for each land class in each area. Primarily because of differences in growing seasons, the southern area has the highest repayment component for its land classes and the northern area has the lowest. From the payment capacity for each land class in each area is deducted the estimated cost of operating and maintaining⁵⁰ the system that the irrigator must pay, and the difference represents the repayment component for that land class. Using this method, the amount that each irrigator would pay for constructing of the system would be determined by applying the rate for each land class specified in the District's threeway contract to the number of acres in the various classes. The James River Irrigation District three-way contract, for example, provides for using figures of \$4.21 per acre for class one land, \$2.01 per acre for class two land and thirty-six cents per acre for class three land.⁵¹ The table below lists the acres in the various land classes by areas and the repayment component rates and estimated operation and maintenance charges for each class for the initial 255,000 acre phase of the Garrison Unit as set out in the project report of February, 1965: 52

Division and Land Class	Acres in Land Class	Construction Charge O	Estimated & M Charge	Total Irrigator Charge
Northern				
Class 1	8,878	3.93	5.03	8.96
Class 2	30,250	2.23	5.03	7.26
Class 3	76,917	.48	5.03	5.51
		<u> </u>		<u>-</u>
Total or Average	116,000	1.40	5.03	6.43
Central				
Class 1	3,377	4.10	5.05	9.15
Class 2	28,130	2.40	5.05	7.45
Class 3	43,163	.65	5.05	5.70
			·	
Total or Average	74,760	1.47	5.05	6.52

WATER CHARGES PER ACRE TO BE PAID BY IRRIGATOR BY DIVISION AND LAND CLASS

49. E.g. James River Contract, Art. 12(b). Alternative formulas are provided. See James River Contract, Art. 12 (a) and Art. 12 (e).

50. See the discussion infra on operation and maintenance.

51. James River Contract, Art. 12 (a).

52. Bureau of Reclamation, Study of Garrison Diversion Unit, at 12.

Southern				
Class 1	3,063	4.41	5.97	10.38
Class 2	18,548	2.21	5.97	8.18
Class 3	37,719	.56	5.97	6.53
	<u></u>	1.07		
Total or Average	59,330	1.27	5.97	7.24
250,000 Acre Project—Average		1.20	5.26	6.46

The "construction charge" figures include the twenty cents per acre that is to be repaid by the irrigation district toward the cost of the supply works system.

But the cost to the individual irrigator need not necessarily be based on the number of acres of class one, two, and three land that he has at the rates set forth in the irrigation district's threeway contract. Instead the irrigation district may establish different rates,⁵³ perhaps even going to the extent of assessing each acre of irrigable land at the same rate regardless of land class. The North Dakota legislature has provided that irrigation district assessments are to be spread on "each unit or tract of land in the district in proportion to the benefits received."⁵⁴ Does class three land receive the same benefit as class one land?

Under equal assessments per acre regardless of land class, an irrigator would in effect pay a lower rate for his class one land and a higher rate for his class three land than under the threeway contract formula. The equal rate approach would in all probability do away with the "ability to pay" principle, unless there was a general averaging out. But it would appear that if the irrigation districts assessed the irrigators at a flat rate for each acre, the effects would be to decrease the class one and two rates substantially, which represent only about one-third of the assessable land, and more than double the class three rates since this class represents about two-thirds of the assessable land. Although the various classes of land are often intermingled, there are certain areas which contain a much higher percentage of the better irrigable lands than others, so that the assessments would not very likely average out among the various owners. Thus it would appear

54. N.D. CENT. CODE § 61-09-03; see generally N.D. CENT. CODE ch. 61-09 (1960).

^{53.} E.g. James River Contract, Art. 12 (a) (b). "... it being understood that the use of such rates by the Secretary shall not in any way limit the authority of I-District's Board of Directors to assess the various land classes in I-District at rates which they find equitable \ldots ."

[&]quot;It is the intent of the parties hereto that all irrigable lands in the I-District service area shall be placed in one of the three repayment classes, based on the estimated repayment capacity of each class and that assessments for construction charges shall be varied in accordance with such land classes. The I-District Board of Directors may, after consultation with the Secretary, after the end of the development period and at times during the repayment period (1) transfer land from one class to another and (2) assign repayment ratings to any class different from those determined by the Contracting Officer; it being understood that such action shall not be cause or basis for modifying the annual installment as fixed in Article 12 (a)."

that an irrigation district board will probably not be willing to substantially increase the rate for the larger portion of its assessable land from that set forth in the contract while lowering the rate on a much smaller portion of the land that it assesses. The irrigation districts probably will choose to assess the irrigator for his repayment component at the rates which are specified in the contract. Undoubtedly there are administrative advantages to a flat rate charge, and perhaps as the irrigable land is developed and comes into full production, various districts will begin to experiment with equalized rates.

Whatever final assessment figure is used, the charge is set out to be paid during a forty year period following the development period.55

B. Operation and Maintenance

All of the irrigation districts are placed in one of three Operating Divisions, into which the project has been divided: Northern, Central, and Southern.⁵⁶ Hopefully joint operation of all the distribution systems in each division will be more efficient with lower costs resulting than would be the case if each distribution system was operated independently. And since operating costs will constitute from two-thirds to three-fourths of the irrigator's water costs.⁵⁷ efficient operation should be very important to him. Within each division the operations and maintenance charge to the irrigator will be uniform regardless of land class.58

To carry out this joint operation each Operating Division will have a Consolidated Operating Agency (COA) that will be responsible for all of the operation and maintenance work within the Division.⁵⁹ Each COA is to have a Board composed of representatives of the various irrigation districts within the operating division based on one representative for each 50,000 acres of irrigable land and a representative of the Conservancy District. Additional provisions deal with peculiar situations that may arise. Each year the COA is to formulate an operation and maintenance program for the distribution works. It is to employ the necessary personnel to accomplish the actual operation of the distribution system, and it is to be financed from irrigation district assessments and Conservancy District levies, if necessary.

The federal government will operate and maintain the distri-

^{55.} E.g. James River Contract, Art. 12 (a). (For the definition of development period see n. 44, supra.)

^{56.} E.g. James River Contract, Art. 8.
57. See table in the text supra at n. 52.

^{58.} James River Contract, Art. 15. 59. Id., Art. 8.

bution systems until at some point during the development period that chore is transferred to the irrigation districts.⁶⁰ The federal government will operate and maintain the supply works systems essentially until construction has proceeded far enough for the facilities to be rated "in good condition for the purposes for which constructed."⁶¹ At that time the operating responsibilities for the supply works may be transferred to the Conservancy District. As the work progresses, more and more of the project operation and maintenance responsibility will be transferred to the districts. The Conservancy District may contract with the COA for operation and maintenance of the supply works.62 Title, however, "to all water supply and distribution works shall be and remain in the United States until otherwise provided by Congress."63

For the protection of its investment as well as for other reasons, the federal government has the right to inspect the systems to see that the contracts are being carried out.64 And if the Secretary of the Interior determines that the contract provisions are not being carried out, he may, upon giving proper notice, require that the districts re-transfer the operation and maintenance to the federal government. The transferred works, or any part thereof, so taken back may be re-transferred. Also, in case of a disaster causing extensive damage, the Secretary of the Interior may take back the operation and maintenance of the system immediately.65

When an irrigator needs water he will place his order with his "ditch rider" usually twenty-four hours in advance of the time that he wants the water delivered.⁶⁶ His order will be scheduled along with others and transmitted to the operating agency. There, orders will be consolidated and transmitted to the Conservancy District. An irrigator generally should receive his water delivery on twentyfour hours notice; however, if there is a water shortage he will be required to share in that shortage because the contracts require that water be prorated among the users without regard for the priority of the irrigator.67 The project is designed to deliver about eighteen inches of water a year for each acre of irrigable land but an irrigator may obtain more water if it is available and if the

^{60.} Id., Art. 7 (a).

^{61.} Master Contract, Art. 6(a).

Id., Art. 6(d). 62.

^{63.} Id., Art. 34.

Id., Art. 7; James River Contract, Art. 7 (d). 64.

Master Contract, Art. 7(b) as to the supply works. (There is no similar provision 65. in the three-way contracts as to the distribution works.)

^{66.} Garrison Manager Interview, June 30, 1967. 67. Master Contract, Art. 5(c). The master and three-way contracts disclaim any liability on the part of the federal government or the Conservancy District for any water shortages on account of drought or other causes. They further disclaim any responsibility for the quality of the water furnished. Master Contract, Art. 5(a). James River Contract, Art. 4(c).

district has the capacity in its system to deliver the water to him. A limiting factor in the amount of water that will be furnished to an irrigator will be the cost in making such deliveries.

Any disputes over the way the transferred works are operated and maintained, or to the effect that any party is not receiving water in the amount and manner to which he is entitled are to be resolved by the Secretary of the Interior if the Conservancy District and the parties involved cannot solve them.⁶⁸ His decision is to be final, except that it may be reviewed by a court having jurisdiction.⁶⁹

Unlike the repayment component for the supply works and distribution system, the assessments for operation and maintenance will be uniform on all irrigable land regardless of class. The irrigator must pay these costs, which will amount to about two-thirds of the irrigators total irrigation bill, during the development period or in other words, as soon as water is available to him. But he will receive help from the Conservancy District. In the first year the irrigator will pay ten percent of what his estimated total water bill will be after the end of the development period,⁷⁰ and the Conservancy District will pay the difference between the irrigator's payment and the actual operation and maintenance cost. Each year the irrigator's payment will be increased by ten percent, so that by the end of the ten year development period the irrigator's water cost would be at the same approximate amount that he will pay during the forty year contract period. During the last few years of the development period the irrigator will actually be paying more than his operation and maintenance cost with the excess going to the Conservancy District. But even then he will be repaying only a small portion of the amount that the Conservancy District advanced to cover his operation and maintenance cost during the earlier part of the development period.

C. Fiscal Agency

The Conservancy District has a role as fiscal agent for the federal government.⁷¹ Certainly a centralized system of accounting is desirable in a project of this size. The Conservancy District is required to collect both the construction installments and the operations and maintenance payments from the various irrigation districts. It is also authorized to collect the charges that are due from municipal and industrial water users, and from fish and wild-

^{68.} Id., Art. 9. 69. Id.

^{70.} See Bureau of Reclamation, Study of Garrison Diversion Unit, at 12; James River Contract, Art. 10.

^{71.} E.g. James River Contract, Art. 18.

life, power, and recreation sources, for each of these areas has to pay for a share of the project.⁷²

To help assure repayment of the federal government, the Conservancy District is authorized to use all means available to collect the charges and levies owed, including withholding of water.78 There are certain times at which the Conservancy District must withhold water.⁷⁴ Even when it has water available, the irrigation district would, in turn, withhold water from delinquent irrigators within the district.⁷⁵ Since under ordinary circumstances, the irrigator cannot afford to have his water supply cut off, this collection method should be particularly effective in forcing payment.

The Conservancy District has to maintain records of the accounts and financial transactions that it carries on.⁷⁶ It must also furnish an annual report to the Secretary of the Interior on the unit water supply and on the disposition of that water.

But the Conservancy District is more than just a collection agency. It has the authority to use the one mill levy to perform some positive functions, two of which have already been pointed out. They are (1) assisting the irrigation districts in paying for the supply works and (2) assisting the irrigators in paying the operations and maintenance cost during the development period.

A third area of financial responsibility relates to the Conservancy District's obligation for "missing acres."⁷⁷ The missing acre situation exists in the Garrison Unit development because of the procedure followed in the organization of the project area irrigation districts. The North Dakota legislation relating to the organization of irrigation district contemplates that all of the potentially irrigable land in an area where an irrigation development is proposed will be included in the irrigation district if the owners of a majority

(1) In arrears in the payment to C-District of charges for the de-livery of water accrued under this contract.
 (2) More than 12 months on arrears in the payment to the United

States of any construction charges accrued under this contract.

(3) In arrears in the advance payment to the United States of the annual charges fixed under Article 13 of this contract or in the advance payment of the other charges fixed under Article 17 of this contract." James

River Contract, Art. 22(b). "No water shall be delivered by I-District through distribution works or otherwise 75 to any person or lands therein which may be in arrears in the payment to 1-District of any assessments, tolls, or other charges levied or established by I-District for the purpose of raising revenues to meet the payment by I-District to the United States of any of I-District's obligations under this contract." Id., Art. 22(c).

76. Master Contract, Art. 30.

77. James River Contract, Art. 1(k). "'Missing acres' shall mean irrigable acres which, at one particular time, are within the service area but not within the district area."

^{72.} See Master Contract, Art. 11, 12, 18-20, 24 and 25. 73. Id., Art. 18. For the Conservancy District's right to terminate all of the irrigation district's water rights see Master Contract, Art. 22(d). 74. "No water shall be delivered to I-District pursuant to this contract, or by I-Dis-

trict through distribution works or otherwise, to or for the use of persons or lands therein during any period in which I-District may be:

of the irrigable land want to have the district established.⁷⁸ In other words, the owners of a majority of the irrigable land may force the minority to have their land included in the irrigation district. Prior to the creation of the Garrison Diversion unit, this procedure had been followed in organizing North Dakota irrigation districts, but in one instance it resulted in a serious problem that was only solved when the irrigation project originally proposed was abandoned and the district itself was dissolved.⁷⁹ The district involved in this case was the Heart River Irrigation District organized in the late 1940's and dissolved in the 1950's.⁸⁰ Although several other factors were involved, the experience did stimulate development of a slightly different procedure for organizing irrigation districts in the Garrison Diversion Unit. This new procedure, simply stated, was to leave out of the district the land of any person who objected to having his land included. Of course, such a person's land will not be eligible for any part of the irrigation water supply, nor will it be assessed for irrigation water costs. These lands which are irrigable but which are not in the irrigation district are the "missing acres." Although these "missing acres" are not getting water, their share of the construction costs have to be paid to the federal government since they have been included to establish the feasibility of irrigation development in the area^{s1} and used to justify the project. Since the irrigation district only has authority to assess benefited lands in the irrigation district, it is necessary that some other source of revenue be found to pay the costs allocated to the "missing acres." The Conservancy District provides this source for the Garrison Diversion unit. In each of the eleven irrigation districts organized, a certain percentage of the irrigable lands has been opted out by its owner, so this use of revenue by the Conservancy District will be important.

The District will dedicate a portion of the revenue it receives from the one mill levy to financing these "missing acres" until these acres or other lands that may be served are petitioned into the district and are placed in an assessable status. Officials con-

See statutes discussed at notes 20-22, supra.
 Garrison Manager Interview, July 13, 1967.
 For litigation involving an attempt by owners of land included in the irrigation district to get their land excluded, in which the court concluded that it was for the district's board to make the decision as long as it was based upon a reasonable purpose see In re Heart River Irr. Dist., 49 N.W.2d 217 (N.D. 1951). Prior litigation to deter-mine a procedural issue in this matter may be found at 47 N.W.2d 126 (1951).

^{81. &}quot;A comparison of annual benefits and costs for the Garrison Diversion unit under full development not adjusted to a common-time basis results in a benefit-cost ratio of 1.75. The annual benefits total \$43,896,000 and the annual costs \$25,042,000, of which \$19,672,000 is capital costs (annual cost of \$720,339,000 for 100 years at 2½ percent interest), and \$5,370,000 is annual operation, maintenance, and replacement. This indicates that a more favorable benefit-cost ratio would result from a shorter period of development, but the absolute maximum limit would be a ratio of 1.75." H.R. Doc. No. 325, 86th Cong. 2d Sess., at 64.

nected with the Conservancy District are optimistic that this will occur early in the development of irrigation in the various areas.⁸² Because the amount of funds that the Conservancy District will have for this purpose is limited, the District has insisted on a high degree of participation by owners of irrigable land within the irrigation district's area before that district would be eligible for such "missing acres" assistance. At the present time, apparently in excess of seventy-five percent of the potentially irrigable land in the various districts has been included in the districts.

There are also two reserve funds that must be established by the Conservancy District. The Deficiency Reserve Fund is to be accumulated at the rate of at least \$150,000 a year until the figure of \$750.000 is reached.83 Thereafter assessments are to be made to maintain the fund in an amount agreed upon between the Contracting Officer for the federal government and the Conservancy District as adequate to assure payment of future obligations under the contract. Probably the need for this fund will cease within several years after water is first available because within that time the heavy demand for Conservancy District funds for operation and maintenance assistance and for payments to cover missing acres will terminate. Further, within that time the irrigation districts should have become well established and financially able to take care of their financial obligations. Anyway, the rate at which the project develops will be one of the main factors in determining the need for this fund and its size.

The second reserve fund is the Operation and Maintenance Emergency Reserve Fund.⁸⁴ It is to be accumulated over a ten year period from levies and assessments until it reaches fivehundred thousand dollars. It is to be used for emergency repairs and extraordinary maintenance of the supply and distribution works. The establishment of this fund by the Conservancy District eliminates the need for the individual irrigable district to make levies of special assessments to provide for such a fund. The various consolidated operating agencies, which are composed of irrigation districts, may borrow from this fund and will be required to repay the fund through special assessments that the districts will make. No definite plan of repayment to this fund by the respective irrigation districts has been worked out, but the Master Contract specifies that assessments for this purpose must be uniformly applied to all irrigation contractors within the affected operating division.85 One can assume from this that the financial circumstances of the

 ^{82.} Supra note 79.
 83. Master Contract, Art. 13(b).

^{84.} Id., Art. 13(2). 85. Id.

irrigation districts and the extent of the disaster will play a large part in determining the terms for repayment.

D. The 160 acre limitation

Under the Reclamation Act of 1902⁸⁶ an individual landowner may secure a water right for only 160 acres. This provision is carried forward into the contracts⁸⁷ here involved as it should be since this is applicable federal law. Arguably modern farming methods have outdated this provision. A recent California study suggests a minimum of 640 acres.⁸⁸ Apparently there is under consideration a bill that would entitle a landowner to a water right for 160 acres of Class one land or such a greater acreage of Class two or three land as is determined by the Secretary of the Interior to be equivalent to 160 acres of Class one land.⁸⁹ Assuming the classification system to be accurate, an irrigator should gain more from 160 acres of Class one land than from land in either Class two or Class three so that there appears to be a logical basis for the proposed legislation. Of course one difficulty will be in determining the rating that should be given to Class two and Class three land in relation to Class one land. The decision by the Secretary of the Interior would have to be based on careful studies of the relative benefit derived from the various classes of land. Of course, the finding of the California study is that 160 acres is not enough even for Class one land.

What is the purpose for the restriction? The California study, citing supporting authority, attributes the restriction to the fact that an irrigator was being given an interest free loan in that he could pay off present construction charges over a deferred time period at no interest and that the acreage limitation was his quid pro quo. If this is so, the report argued, then it would be simple to allow the irrigation of any larger number of acres by requiring a payment of interest such as presently exists under some federal legislation.90

The Supreme Court of the United States, per Mr. Justice Clark described it this way:

From the beginning of the federal reclamation program in 1902, the policy as declared by the Congress has been one re-

^{86. 32} Stat. 388, 389; 43 U.S.C.A. § 431. "No right to the use of water for land in private ownership shall be sold for a tract exceeding one hundred and sixty acres to any one landowner, and no such sale shall be made to any landowner unless he be a bona fide resident on such land, or occupant thereof residing in the neighborhood of said land, and no such right shall permanently attach until all payments therefor are made.

^{87.} Master Contract, Art. 26-28. 88. See Calif. Report of the Governor's Task Force on the Acreage Limitation PROBLEM (Jan. 4, 1968). 89. S. 266, 90th Cong. 1st Sess. (1967). 90. 70 Stat. 1044; 70 Stat. 775; 72 Stat. 82, and 73 Stat. 641.

quiring that the benefits therefrom be made available to the largest number of people, consistent, of course, with the public good. This policy has been accomplished by limiting the quantity of land in a single ownership to which project water might be supplied

As to the claim of discrimination in the 160-acre limitation, we believe that it overlooks the purpose for which the project was designed. The project was designed to benefit people, not land. It is a reasonable classification to limit the amount of project water available to each individual in order that benefits may be distributed in accordance with the greatest good to the greatest number of individuals.

The limitation insures that this enormous expenditure will not go in disproportionate share to a few individuals with large land holdings. Moreover, it prevents the use of the federal reclamation service for speculative purposes. In short, the excess acreage provision acts as a ceiling, imposed equally upon all participants, on the federal subsidy that is being bestowed.91

In the Report on Garrison submitted by the regional office of the Bureau of Reclamation we find the following statement: "Provision of opportunities for the establishment of family-sized farms through irrigation development is a national policy for improving the general welfare."⁹² Thus, whatever the original 1902 policy may have been, even if as limited as suggested by the California report, it is clear that the whole family farm versus "large" farm or "corporate" farm problem is interjected at this point today. And arguably there must be a water right at least sufficient to support a "family" farm in order to be consistent as the United States Supreme Court says "with the public good." In this connection it is clear that a man and wife can get 320 acres irrigated.⁹³ And presumably there can be irrigated up to 160 acres of land which appears in a child's name. Assuming that an acreage sufficient to support a family farm is determined,⁹⁴ then existing provisions could still be applied for "spreading the benefits." Existing provisions provide generally that "excess" lands may be irrigated if the owner thereof executes a recordable contract agreeing to sell the excess land within a certain period of time at an appraised value.95

^{91.}

Ivanhoe Irr. Dist. v. McCracken, 357 U.S. 275, 292, 297 (1958). BUREAU OF RECLAMATION, REPORT ON THE GARRISON DIVERSION UNIT at 59. 92.

^{93.} Master Contract, Art. 26.
94. This it would seem would be a difficult thing to do. Some allowance should be made for the climatic conditions of the area where the project is located, the crops to be made for the climatic conditions of the area where the project is located, the crops to be made for the climatic conditions of the area where the project is located. raised, the size of the family and the land classification. But the problem is more complex than what just these factors indicate considering, in particular, modern farming methods. How much weight should each of these various factors be given?

^{95.} See Master Contract, Art. 27-28.

Perhaps it would be possible to evade this contract provision and law by renting land rather than owning the fee title to it. The contract refers to "beneficial ownership" without defining the term. One cannot irrigate in excess of 160 acres of which he has "beneficial ownership." Suppose an individual who owns fee title to 160 acres rents an additional 160 acres, may he irrigate 320 acres on the basis that while he has "beneficial ownership" of the 160 acres to which he has fee title, he does not have "beneficial ownership" of the 160 acres that he is renting? And if he can rent 160 acres, why not 10,000 acres? The federal statute does not refer to "beneficial" ownership.⁹⁶ A severe limitation on any rental attempt to evade this provision is the North Dakota statute which prohibits leases of agricultural lands in excess of ten years.⁹⁷ Extremely large irrigation developments would not be very likely to develop in North Dakota because the blocks of land suited to irrigation are fairly well scattered, and irrigation, in all probability, will be combined with dryland farming. But it is still likely that there will be a substantial number of farmers who will want to irrigate more land than 160 acres.

IV. EVALUATION AND CONCLUSIONS

The evaluation and conclusions in this section are necessarily limited because of the general overview of the whole article. What little is done in this section will be drawn, it is hoped, from the material that has already been presented or at least from material contained in the sources referred to in connection therewith.

First, it can be noted that the irrigation districts were formed with the overwhelming support of the potential irrigators. Except for the Dickey-Sargent and Middle Souris irrigation districts at least eighty percent of the votes cast at the elections approving the establishment of the eleven respective districts were in favor of forming that district. Second, only those who wished to have their land included in the districts, or who did not object to having their land included will be assessed for irrigation water charges to pay for the necessary works. Of course those whose land is not included cannot receive water from the project, and there is, too, the annual one mill levy that the Conservancy District may levy on all property in the twenty-five county area of the District. Both of these factors when taken together suggest strong farmer support for the project and the prospect of close cooperation.

Third, there exists here a combination of centralized control in

^{96.} See note 86, supra.
97. N.D. CENT. CODE \$ 47-16-02. (1960).

some aspects of the Garrison Project as provided by the Conservancy District and local control in others as provided by the irrigation districts. While the Conservancy District is the fiscal agent for the federal government and the administrator over the water supply, the irrigation districts are more localized bodies free to work on local problems. These irrigation districts, with their broad powers, can receive aid from government agencies and can contract fairly freely with other agencies and bodies. They also administer the irrigation district's distribution system, and such things as weed control districts can be formed if necessary. The irrigation district electors are those individuals who own at least five acres of land subject to assessment for irrigation costs and who are residents of the State of North Dakota. They elect their district's board of directors. They have approval power over their district's contracts. The assessments for irrigation costs are made by the district assessor, approved by the Board of Directors, and subject to review at district hearings. The contracts contain a number of provisions fostering local control and operation. Placing and keeping the responsibility for the project operation primarily in the hands of the irrigators who are the most directly interested and who will pay the major cost involved, seems readily defensible. The Conservancy District unifies the project without tying the hands of the irrigation districts.

Next it should be observed that if the Garrison project had been planned as a single purpose project, it would undoubtedly not be underway. By planning to serve many purposes and combining a projected value for all of the benefits that would result, an acceptable benefit-cost ratio was developed. And yet seemingly thorough studies of the lands themselves were made so that only those lands most suited to irrigation were initially classified as irrigable. One hears frequently that many acres classified as not suitable for irrigation because of topographic deficiencies may in fact be irrigable. And it is expected that many of these acres will be irrigated in the future; but this policy of including only better lands is still a wise one, at least from the standpoint of having a conservative benefitcost ratio analysis.

Last, but not least, should be mentioned the strong effort that has been made to relieve the irrigator of heavy financial outlays until he has become established as an irrigation farmer. Irrigation is an expensive proposition for the irrigator in terms of the investments that are necessary on the irrigation works and the crops. Often, depending upon the crop being planted, it may cost the farmer three times as much to farm an irrigated crop as it does to farm dryland. By deferring payments for the supply works and distribution system and helping the irrigator to pay the initial operations and maintenance cost, the irrigator is given time to put himself on good financial footing before he is required to repay any substantial amounts for the irrigation system. If faced with heavy initial payments, many of the irrigators would probably have serious financial problems, and this prospect in turn might cause many to stay out who once having joined would have made a go of it.