October 1997

GARRISON DIVERSION ISSUES - BACKGROUND MEMORANDUM

The Garrison Diversion Overview Committee originally was a special committee created in 1977 by House Concurrent Resolution No. 3032 and recreated in 1979 by Senate Concurrent Resolution No. 4005. In 1981 the 47th Legislative Assembly enacted North Dakota Century Code Section 54-35-02.7, which statutorily created the Garrison Diversion Overview Committee. The committee is responsible for legislative overview of the Garrison Diversion Project and related matters and for any necessary discussions with adjacent states on water-related topics.

Section 54-35-02.7 directs that the committee consist of the majority and minority leaders and their assistants from the House and Senate, the Speaker of the House, the President Pro Tempore of the Senate selected at the end of the immediately preceding legislative session, the chairmen of the House and Senate standing Committees on Natural Resources, and the chairmen of the House and Senate standing Committees on Agriculture.

HISTORY OF THE PROJECT

The Garrison Diversion Unit is one of the principal developments of the Pick-Sloan Missouri River Basin program, a multipurpose program authorized by the Flood Control Act of 1944 (Pub. L. 78-534; 57 Stat. 887). The Pick-Sloan plan provided for construction of a series of dams on the Missouri River to control flooding, provide power generation, and maintain a dependable water supply for irrigation, municipalities, industry, recreation, wildlife habitat, and navigation. Approximately 550,000 acres of land in North Dakota were inundated by reservoirs on the Missouri River under the Pick-Sloan plan. It has been estimated that this inundation of North Dakota land resulted in the loss of approximately 5.8 million tons of lignite, five million barrels of oil, \$3.5 million in forest products, over \$1.5 billion in personal income, \$4.5 billion in gross business volume, and 2,600 jobs representing 7,500 to 10,000 people.

One feature of the Pick-Sloan plan was the Missouri-Souris Unit, which was the forerunner of the Garrison Diversion Unit. Under the plan for the Missouri-Souris Unit, water was to be diverted below the Fort Peck Dam in Montana and transported by canal for irrigating 1,275,000 acres; supplying municipalities in North Dakota, South Dakota, and Minnesota; restoring Devils Lake; conserving wildlife; and augmenting the Red River.

The building of Garrison Dam changed the diversion point of the Missouri-Souris Unit from Fort Peck Dam to Garrison Reservoir (Lake Sakakawea). With the change in the diversion point and the selection of some different areas to be irrigated, the plan was renamed the Garrison Diversion Unit. After considerable study and review of the Missouri-Souris Unit, Congress reauthorized the project as the initial stage, Garrison Diversion Unit, in August 1965 (Pub. L. 89-108; 83 Stat. 852).

The first detailed investigations of the Garrison Diversion Unit were completed in 1957 and involved a proposed development of 1,007,000 acres. The initial stage of the Garrison Diversion Unit, authorized in 1965, provided for irrigation service to 250,000 acres in North Dakota. This plan involved the construction of major supply works to transfer water from the Missouri River to the Souris River, James River, Sheyenne River, and the Devils Lake Basin. The plan also anticipated water service to 14 cities, provided for several recreation areas, and provided for a 146,530-acre wildlife plan to mitigate wildlife habitat losses resulting from project construction and enhancement of other wetland and waterfowl production areas.

Under the 1965 authorization, the Snake Creek pumping plant would lift Missouri River water from Lake Sakakawea behind Garrison Dam into Lake Audubon, an impoundment adjacent to Lake Sakakawea. From Lake Audubon the water would flow by gravity through the 73.6-mile McClusky Canal into Lonetree Reservoir, situated on the headwaters of the Sheyenne River. The Lonetree Reservoir would be created by construction of Lonetree Dam on the upper Sheyenne River, Wintering Dam on the headwaters of the Wintering River, and the James River dikes on the headwaters of the James River. Lonetree Reservoir is situated so that water can be diverted by gravity into the Souris, Red, and James River Basins and the Devils Lake Basin.

The Velva Canal would convey project water from the Lonetree Reservoir to irrigate two areas totaling approximately 116,000 acres. The New Rockford Canal would convey project water for irrigation of approximately 21,000 acres near New Rockford and deliver water into the James River Feeder Canal for use in the Oakes-LaMoure area. The Warwick Canal, an extension of the New Rockford Canal, would provide water for irrigation in the Warwick-McVille area and provide water for the restoration of the Devils Lake chain.

The United States Bureau of Reclamation had overall responsibility for operation and maintenance of the Garrison Diversion Unit and would operate and maintain all project works during the initial period following completion of construction.

A number of concerns have halted construction on the project in recent years, including:

- Legal suits brought by groups, such as the National Audubon Society, seeking to halt construction of the Garrison Diversion Unit claiming that the project violates the National Environmental Policy Act and to enforce a stipulation between the United States and Audubon to suspend construction until Congress reauthorizes the Garrison Diversion Unit
- Numerous problems concerning wildlife mitigation and enhancement lands.
- Canadian concerns that the Garrison Diversion Project would allow transfer of foreign species of fish and other biota to the detriment of Canadian waters in violation of the Boundary Waters Treaty of 1909.

CANADIAN CONCERNS

Canadian interest in the Garrison Diversion Unit has centered on concerns that because the Garrison Diversion Unit involves a transfer of water from the Missouri River to the drainage basins of the Souris and Red Rivers, the return flows entering Canada through the Souris and Red Rivers would cause problems with regard to water quality and quantity.

In 1973 the Canadian government requested a moratorium on all further construction of the Garrison Diversion Unit until a mutually acceptable solution for the protection of the Canadian interests, under the Boundary Waters Treaty of 1909, was achieved. The United States government responded by formally stating its recognition of its obligation under the Boundary Waters Treaty and adopting a policy that no construction affecting Canada would be undertaken until it was clear that this obligation would be met.

During 1974 several binational meetings of officials were held to discuss and clarify the Canadian concerns over potential degradation of water quality. An agreement was reached in 1975 between the governments of Canada and the United States to refer to the International Joint Commission the matter of potential pollution of boundary waters by the Garrison Diversion Unit.

The International Joint Commission created the International Garrison Diversion Study Board. The board concluded that the Garrison Diversion Unit would have adverse impacts on water uses in Canada, including adverse effects on flooding and water quality. The board specifically recommended that any

direct transfer by the Garrison Diversion Unit of fish, fish eggs, fish larvae, and fish parasites be eliminated by adopting a closed system concept and the installation and use of a fish screen structure.

2

In August 1984 a press line, approved by representatives of Canada and the United States, was issued announcing a general agreement between the two governments that Phase I of the initial stage of the Garrison Diversion Unit could be constructed. Canada, however, remained firmly opposed to the construction of any features that could affect waters flowing into Canada.

GARRISON DIVERSION UNIT COMMISSION

For fiscal year 1985 the water and energy appropriations bill, signed by the President on July 16, 1984, contained an agreement to establish a commission to review the Garrison Diversion Unit.

The Garrison Diversion Unit Commission was a 12-member panel appointed by the Secretary of the Interior to reexamine plans for the Garrison Diversion Unit in North Dakota. The commission was directed to examine, review, evaluate, and make recommendations regarding the existing water needs of North Dakota and to propose modifications to the Garrison Diversion Unit before December 31, 1984. Construction on the project was suspended from October 1 through December 31, 1984.

The commission worked under the restriction that any recommendation of the commission must be approved by at least eight of the 12 members and that should the commission fail to make recommendations as required by law, the Secretary of the Interior was authorized to proceed with construction of the Garrison Diversion Unit as currently designed.

Congress directed the commission to consider 11 specific areas:

- The costs and benefits to North Dakota as a result of the Pick-Sloan Missouri River Basin program.
- The possibility for North Dakota to use Missouri River water.
- The need to construct additional facilities to use Missouri River water.
- Municipal and industrial water needs and the possibility for development, including quality of water and related problems.
- The possibility of recharging ground water systems for cities and industries, as well as for irrigation.
- The current North Dakota water plan to see if parts of the plan should be recommended for federal funding.
- Whether the Garrison Diversion Unit can be redesigned and reformulated.

- The institutional and tax equity issues as they relate to the authorized project and alternative proposals.
- The financial and economic impacts of the Garrison Diversion Unit, when compared with alternative proposals for irrigation and municipal and industrial water supply.
- The environmental impacts of water development alternatives, compared with those of the Garrison Diversion Unit.
- The international impacts of the water development alternatives, compared with those of the Garrison Diversion Unit.

The commission released its final report and recommendations on December 20, 1984. commission affirmed the existence of a federal obligation to the state of North Dakota for its contribution to the Pick-Sloan Missouri River Basin program but recommended that an alternative plan be implemented in place of the 250,000-acre initial stage of the Garrison Diversion Unit as authorized in 1965 and the original project authorization in 1944. commission recommended that Lonetree Dam not be completed at this time and that the Sykeston Canal be constructed as the functional replacement. The commission specifically said while the Lonetree Dam and Reservoir should remain an authorized feature of the plan, the construction should be deferred pending a determination by the Secretary of the Interior consisting of a demonstration of satisfactory conclusion of consultations with Canada and after appropriation of funds by Congress. The commission recommended that the Garrison Diversion Unit be configured to provide irrigation service to 130,940 acres in the Missouri River and James River Basins instead of the first stage 250,000-acre project. The commission also recommended that the first phase of the Glover Reservoir be included as a feature of the plan in lieu of Taayer Reservoir for regulation of flows in the James River.

The commission further recommended the establishment of a municipal, rural, and industrial system for treatment and delivery of quality water to approximately 130 communities in North Dakota. A municipal and industrial water treatment plant with a capacity of 130 cubic feet per second was recommended to provide filtration and disinfection of water releases to the Sheyenne River for use in the Fargo and Grand Forks areas.

An alternate state plan for municipal water development was submitted to the Garrison Diversion Unit Commission by Governor Allen I. Olson and Governor-elect George Sinner, proposing that the state would design and construct the water systems and pay 25 percent of their costs. In return, the federal government would provide up to \$200 million for municipal water development projects, but the funds

would be nonreimbursable. The federal government under the alternate state plan would pay 75 percent of the construction costs of the systems with only the operation and maintenance costs borne by the benefiting cities.

AUTHORIZATION LEGISLATION

Following the issuance of the commission's final report, the Garrison Diversion Unit Reformulation Act of 1986, H.R.1116, was enacted into law. This legislation was approved by representatives of the state of North Dakota, Garrison Diversion Conservancy District, National Audubon Society, and National Wildlife Federation.

The legislation addressed the James River by dictating a comprehensive study of effects over the next two years during which time construction of certain features could not be undertaken. These features were the James River Feeder Canal, the Sykeston Canal, and any James River improvements. Of the 32,000-acre New Rockford extension, included in the Garrison Diversion Unit Commission final report, 4,000 acres were transferred to the West Oakes area and 28,000 acres were authorized for development within the Missouri River Basin.

The legislation also contained provisions for:

- 1. 130,940 acres of irrigation.
- Deauthorization of the 1944 Flood Control Act and the 1965 Garrison authorization.
- Preservation of North Dakota's water rights claims to the Missouri River.
- Nonreimbursement of features constructed prior to enactment which would no longer be employed to full capacity, to the extent of the unused capacity.
- Acre-for-acre mitigation based on ecological equivalency rather than the 1982 mitigation plan.
- Deauthorization of the Taayer Reservoir and purchase of the Kraft Slough for waterfowl habitat.
- Continued authorization, but no construction, of the Lonetree Reservoir. Sykeston Canal was mandated for construction following required engineering, operational, biological, and economic studies.
- Irrigation acreage other than on the Indian reservations or the 5,000-acre Oakes Test Area could not be constructed until after September 30, 1990.
- A \$200 million grant for construction of municipal and industrial water delivery systems. A \$40.5 million nonreimbursable water treatment facility to deliver 100 cubic feet per second to Fargo and Grand Forks was authorized. All water entering the Hudson

Bay drainage system would have to be treated and comply with the Boundary Waters Treaty of 1909.

- Municipal and industrial water delivery systems for the Fort Berthold, Fort Totten, and Standing Rock Reservations.
- Substitution of the Sykeston Canal for Lonetree, but Lonetree could be built if:
 - The Secretary of the Interior determines a need for the dam and reservoir.
 - Consultations with Canada are satisfactorily completed.
 - c. The Secretaries of State and the Interior certify determinations to Congress and 90 days have elapsed.
- Irrigation soil surveys that must include investigations for toxic or hazardous elements.
- Federal participation in a wetlands trust to preserve, enhance, restore, and manage wetland habitat in North Dakota.

GARRISON MUNICIPAL, RURAL, AND INDUSTRIAL WATER SUPPLY PROGRAM

As indicated above, included within the Garrison Diversion Unit Reformulation Act of 1986 (Pub. L. 99-294; 100 Stat. 433) is an authorization enabling Congress to appropriate \$200 million for the Garrison municipal, rural, and industrial water supply program. These federal funds are to be utilized for the planning and construction of water supply facilities for municipal, rural, and industrial use throughout the state of North Dakota.

On July 18, 1986, the Garrison Diversion Conservancy District and the State Water Commission entered an agreement for the joint exercise of governmental powers. This agreement allows the Garrison Diversion Conservancy District to use the expertise of the State Water Commission in developing and implementing the Garrison municipal, rural, and industrial water supply program. In addition, the agreement directs the conservancy district to enter into a cooperative agreement with the Secretary of the Interior and designates the conservancy district as the fiscal agent for the state of North Dakota concerning money received and payments made to the United States for the Garrison municipal, rural, and industrial water supply program.

On November 19, 1986, the United States and the Garrison Diversion Conservancy District entered an agreement that designates the Garrison Diversion Conservancy District to act on behalf of the state of North Dakota in the planning and construction, as well as the operation and maintenance, of the water systems constructed pursuant to the Garrison Diversion Unit Reformulation Act of 1986. This agreement contains a definition of the responsibilities of the

United States and the Garrison Diversion Conservancy District under the agreement, provisions concerning the work to be undertaken by the conservancy district, stipulations concerning the transfer of funds, and the procedure for reporting, accounting, and reviewing the planning and construction programs. It should be noted that the agreement also provides that the Southwest Pipeline Project is eligible to receive funding under this program.

APPROPRIATIONS

1966. Congress has appropriated \$594,847,000 for the Garrison Diversion Unit Project. Of this amount, \$570,020,408 has been expended. Since 1986, \$347,407,000 has been spent on the Garrison Diversion Unit. This includes \$97,155,000 for state municipal, rural, and industrial water supply projects; \$89,771,000 on water supply and operation, maintenance, and research; \$36,744,000 on fish and projects; \$22,501,000 for \$20,100,000 for Indian municipal and industrial water supply projects; \$13,001,000 on the Lonetree Game Management Area; \$10,288,000 for the wetlands trust; \$3,622,000 on recreation facilities; \$1,665,000 in miscellaneous expenses: \$40,796,000 in nonfederal funds. Expenditures in 1996 totaled \$25,011,500 in federal funds and \$3,495,000 in nonfederal funds. Of this amount, \$8,130,000 was for the state municipal, rural, and industrial water supply program; \$6,390,000 was for fish and wildlife facilities; \$2,950,000 was for water supply systems and operation, maintenance, and research; \$2,531,000 was for Indian municipal, rural, and industrial water supply programs; \$1,121,000 was for the Oakes Test Area; \$869,000 was for Jamestown Reservoir modification; \$675,000 was for Indian irrigation projects; \$671,000 was for collaborative studies; \$312,500 was for the wetlands trust; \$110,000 for recreation facilities: was \$1,252,000 was in underfinancing.

Congress appropriated \$23 million for fiscal year 1997. Approximately \$12 million was designated for municipal, rural, and industrial water supply programs and \$3 million for operation and maintenance of project features with the remainder allocated for fish and wildlife and mitigation activities. According to press reports, the Garrison Diversion Unit Project is slated to receive \$28.9 million in fiscal year 1998. The bill contains \$2.5 million in flood control money for Grand Forks and East Grand Forks; \$2 million for the United States Army Corps of Engineers to begin buying land in the Buford-Trenton Irrigation District near Williston; and \$750,000 to protect the water intake system of the Buford-Trenton irrigation pumping plant.

Of the \$200 million authorized for the Garrison municipal, rural, and industrial water supply program, approximately \$120 million has been received since 1986. The committee learned during the 1995-96 interim, however, that the \$200 million will not meet North Dakota's future water needs and thus the state must reallocate how this money is spent before it is exhausted.

The State Water Commission has developed an allocation and schedule of remaining Garrison municipal, rural, and industrial water supply grant funding based on a September 29, 1995, Water Coalition This includes \$29.96 million for funding report. Phase 2 of the Northwest Area Water Supply Project: \$14.71 million for the Ransom-Sargent Rural Water Project; \$9.56 million for the Southwest Pipeline Project; \$6.33 million for the Burleigh water system; \$5.36 million for Grand Forks water treatment plant modifications: \$5.17 million for the Missouri West Water Project; \$5.05 million for the North Valley Rural Water Project: \$2.92 million for the Pierce Rural Water Project; \$2.60 million for Phase 1 of the Northwest Area Water Supply Project; \$3.27 million for other projects; and \$1 million in administration expenses.

The Southwest Pipeline has supplied water to Dickinson since October 15, 1991. The pipeline is currently servicing 15 communities and 11 rural hookups in North Dakota.

Construction on the Northwest Area Water Supply Project is scheduled to commence in 1998 and the project is now in its final design stage. It is anticipated that water will be delivered in 2000. This project is being financed from Garrison municipal, rural, and industrial water supply funds and through bonding. The project is designed to supply water to 15 communities north and west of Lake Sakakawea and five rural water systems with the distribution system being centered in Minot.

During the 1995-96 interim, representatives of the Bureau of Reclamation reported that the bureau is negotiating a cooperative agreement with the North Dakota Game and Fish Department for the department to assume operation and maintenance of the Lonetree Wildlife Management Area. The bureau spent \$6.1 million on wildlife activities in fiscal year 1996. The bureau is negotiating the terms of the water supply agreement for the Oakes Test Area with the Garrison Diversion Conservancy District. Fiscal

year 1996 was the final year of studies at the Oakes Test Area. The bureau expended \$1.1 million on the Oakes Test Area in fiscal year 1996. Also, the Bureau of Reclamation spent \$471,000 in fiscal year 1996 on studies as a result of the collaborative process.

1997 LEGISLATION RELATING TO THE GARRISON DIVERSION UNIT PROJECT

House Bill No. 1073 declared a water supply for eastern North Dakota as a critical priority. This bill was reviewed by the 1995-96 Garrison Diversion Overview Committee and forwarded to the 1995-96 interim Water Resources Committee for its consideration. This bill declared that effective development and utilization of the land and water resources of this state; the opportunity for greater economic security; the protection of health, property, enterprise, and the preservation of the benefits from the land and water resources of this state; and the promotion of the prosperity and general welfare of all the people of North Dakota involve, necessitate, and require the exercise of the sovereign powers of the state. Therefore, it was declared necessary that a means to supply and distribute water to eastern North Dakota for purposes including domestic, rural water, municipal, livestock, light industrial, mining, agriculture, and other uses must be developed. In furtherance of this public purpose, the bill established the supply and delivery of water to eastern North Dakota as a critical priority and the State Water Commission was directed to continue to cooperate with the Garrison Diversion Conservancy District in addressing this critical priority.

RESPONSIBILITIES OF COMMITTEE

To fulfill its responsibility of legislative overview of the Garrison Diversion Unit Project, the committee may wish to continue receiving periodic reports from agencies and officials responsible for various aspects of the project. These agencies and officials would include representatives of the Garrison Diversion Conservancy District, the state's Congressional Delegation, the Governor's office, the Attorney General's office, the State Engineer, the State Water Commission, and the Bureau of Reclamation. The committee may also wish to receive input from interested parties such as the North Dakota Water Users Association and the North Dakota Water Coalition.