### MINUTES

## North Dakota State Water Commission Walhalla, North Dakota

#### August 12, 1981

The North Dakota State Water Commission held a meeting at the Walhalla Country Club, Walhalla, North Dakota, on August 12, 1981. Acting Chairman, Guy Larson, called the meeting to order at 9:30 a.m., and requested Secretary Vernon Fahy to call the roll and present the agenda. Mayor Edward Karel welcomed the group to Walhalla.

#### MEMBERS PRESENT:

Allen 1. Olson, Governor-Chairman (present only for afternoon session) Kent Jones, Commissioner, Department of Agriculture, Bismarck (late arrival) Alvin Kramer, Member from Minot Florenz Bjornson, Member from West Fargo Ray Hutton, Member from Oslo, Minnesota Garvin Jacobson, Member from Alexander Guy Larson, Member from Bismarck Henry Schank, Member from Dickinson Bernie Vculek, Member from Crete Vernon Fahy, State Engineer and Secretary, North Dakota State Water Commission, Bismarck

#### OTHERS PRESENT:

State Water Commission Staff Members Approximately 15 persons interested in agenda items

The attendance register is on file in the State Water Commission offices (filed with official copy of minutes).

The proceedings of the meeting were recorded to assist in compilation of the minutes.

CONSIDERATION OF MINUTES OF JULY 6, 1981 MEETING -APPROVED The minutes of the July 6, 1981 meeting held in Carrington, North Dakota, were reviewed by Secretary Fahy. There were no corrections or additions to the minutes.

It was moved by Commissioner Schank, seconded by Commissioner Kramer, and unanimously carried, that the minutes of the July 6, 1981 meeting be approved as presented. 51

CONSIDERATION OF MINUTES OF JULY 24, 1981 MEETING ~ APPROVED

The minutes of the July 24, 1981 special meeting held in Minot, North Dakota, were reviewed by Secretary Fahy. There were no corrections or additions to the minutes.

It was moved by Commissioner Schank, seconded by Commissioner Kramer, and unanimously carried, that the minutes of the July 24, 1981 meeting be approved as presented.

PEMBINA RIVER PROJECT BRIEFING AND DISCUSSION - PRESENTATION BY CORPS OF ENGINEERS (SWC Project No. 567)

Colonel William Badger, District Engineer for the St. Paul Corps of Engineers, presented an overview of the structure of the Corps of Engineers in the area of civil works, and briefly discussed the Pembina River project.

A movie was shown of previous flooding on the Pembina River by Grant Trenbeath. Mr. Trenbeath stated that any alternative floodway proposals that are considered with the Pembina Dam project must be also considered by Canada. The route that would probably be followed would involve a legal drain that was constructed cooperatively by the United States and Canada. He indicated that the Water Resource Board will be requesting the Canadians to consider the alternative proposals and requested support from the State Water Commission.

Mr. Trenbeath also requested that the Water Commission consider taking some part in a study to determine effects of inundation on tree life and vegetation.

Mr. Don Powell, Project Manager for the Pembina River project, indicated that the feasibility study for the project was completed in 1976 recommending construction of the Pembilier Dam and reservoir. After review of the report by the Corps' Washington office, approval was given to proceed with Phase 1 of the Plan of Study with additional work in the areas of alternative plans and engineering feasibility. Congress authorized the project for further study in 1976. Preparation of the Phase 1 report began in April of 1979 when funding was received from Congress. The alternatives that are now being considered include: 1) Pembilier Dam; 2) boundary floodways; and 3) different combinations and variations of alternatives 1 and 2. The Phase 1 report that will recommend plans for implementation is scheduled for completion in June of 1983. State Water Commission staff are assisting in the hydraulic analysis for the study. Congressional authorization is needed for the construction and future planning efforts, and Mr. Powell noted that construction of the selected alternative is not projected to begin before 1988.

Mr. Powell requested that the State Water Commission, early in 1982, provide the Corps of Engineers a letter expressing the Commission's continued support of the study. He also stated that it is important for the Water Commission and the locals to continue to express their support for project funding to Congress.

Commissioner Kent Jones arrives at meeting, and acts as Chairman of the meeting.

The discussion of the Pembina River project concluded with a number of questions and answers.

SHEYENNE RIVER PROJECT BRIEFING AND DISCUSSION -PRESENTATION BY CORPS OF ENGINEERS (SWC Project No. 1344)

Mr. William Spychalla, Project Manager for the Sheyenne River project, presented a historical overview of the Sheyenne River project accompanied by a series of slides.

Mr. Spychalla stated that in 1970 the multiple-purpose Kindred Lake project was authorized for construction. Considerable opposition to the project was generated in the project area. During the period following authorization, a special study was accomplished to address three main issues associated with the project: 1) potential raises in the ground-water levels adjacent to the project; 2) the magnitude of anticipated improvements in downstream water quality which were associated with reducing the adverse water quality impacts of Garrison Diversion return flows; and 3) the extent of potential bank and shoreline erosion around the project permanent pool. In 1976, studies were initiated to re-evaluate the water resource needs of the basin and to re-formulate alternatives to address the needs including a re-evaluation of the authorized project.

Mr. Spychalla stated that one important aspect of the study was an open and active public involvement program. The Lower Sheyenne River Citizens Committee was formed by the Lake Agassiz Regional Council to provide local input to the planning and evaluation process. The Committee provided a cross-section of the regional views in the water resource issues and met regularly throughout the study process to discuss the needs, issues and alternatives being evaluated. The water resource needs of the basin which were expressed included flood damage reduction; water supply; recreation; fish and wildlife; and water quality. The flooding problem was the most significant need.

In the development of alternative water management plans for the basin, the principal focus was to develop a plan to reduce flood damages. Mr. Spychalla said that as plans were being developed it became apparent that several actions were required by non-federal, or local, interests for any remedial plan to address the flood problems. These actions include: floodplain zoning and regulations; control of drainage; and control of private dike construction.

Of the plans evaluated in the 1980 2) D-2; and 3) K-3. The plan recommended by the Lower Sheyenne River Citizens Committee is a combination of plans D-1 and D-2, which includes six components: 1) a five-foot raise of Baldhill Dam; 2) levees and flood diversion channel at and around West Fargo; 3) flood diversion channel from Horace to West Fargo paralleling the Sheyenne River (these three components are identified for Corps implementation with non-federal sponsorship in cost sharing); 4) ring levees in farmsteads and residencies in the rural areas; 5) multiplepurpose dam on Dead Colt Creek; and 6) an increase of flood water storage capability of existing or drained wetlands particularly in reaches from Baldhill Dam to Kindred (the last three components are listed for other federal agency or non-federal participation).

Mr. Spychalla indicated that implementation percent including a high degree of protection for the City of West Fargo. Moderate protection would be provided for other residential areas and farmsteads, and for riverside urban areas, including the cities of Valley City, Lisbon, and Horace. Also, the project would require a non-federal basin-wide approach to water management activities, and would provide for recreational opportunities that could be developed in conjunction with the project.

The estimated cost of implementation of and non-federal costs.

Mr. Spychalla stated that in order to achieve an orderly process of implementation, several steps are required: 1) receipt of support from non-federal sponsors; 2) completion of the current studies and submittal to Congress for approval; 3) Congressional authorization for construction; 4) detailed planning will be accomplished for construction; 5) legal agreements with non-federal sponsors; and 6) funding for the construction.

Mr. Spychalla stated that if the State Water Commission would be involved in the sponsorship of the project and its components, indication of support for the plan is needed before submittal of the draft report to Congress. The schedule is to have a draft report available for public distribution and review in October, 1981. The preliminary plan and support for the plan are due in the Corps' Chicago Division office in September, 1981.

The discussion was then opened to

questions by the Commission members.

Commissioner Kramer indicated that in previous discussions of this matter, local citizens were assured that a public hearing would be held in the area before the Commission made a final recommendation.

Colonel Badger stated that if it is the the Corps would be willing to make the necessary arrangements for such a hearing.

Commissioner Bjornson stated that she throughout the study period and that much of the information that is being heard at this meeting is a result of public input; therefore, a public hearing at this time is really insignificant.

Secretary Fahy stated that in the past appeared on several occasions before the Water Commission. When the Citizens Committee was created, the State Water Commission agreed that before they made a final decision on this matter there would be a public hearing in the project area. He discussed methods of cost repayment both in the Carter Administration and in the Reagan Administration, and noted that in Congress to date, there are four bills relating to different methods of cost repayment for federal projects. He said that when the State Water Commission is considering agreeing to assume the assurances for project development, it has no way of knowing what local responsibilities might be.

> It was moved by Commissioner Bjornson that the State Water Commission go on record as endorsing further study of flood control for the Sheyenne River Valley area under whatever alternative is finally selected; and that the State Water Commission continue its sponsorship as a local sponsor; however, no assurances will be made as to repayment until the liabilities of the local sponsor are known. The motion received a second from Commissioner Hutton.

In discussion of the motion, Mr. Spychalla selected by the Lower Sheyenne River Flood Control Citizens Committee and suggested that the Commission should consider whether or not it will support the single alternative. He stated that the report clearly indicates that President Carter's Executive Order for cost sharing will be followed by the local sponsors who intend to cooperate.

Colonel Badger indicated that there will probably be several cost sharing changes before a specific figure is determined, and he, too, suggested that the Commission should be concentrating at this time on whether or not it will support the single alternative. He said that the Corps of Engineers will not be able to proceed with Phase 2 of the study before it has received a support commitment from the Water Commission. After the draft report has been completed, a public meeting will be held in the project area. After the first of the year (1982), the Corps will be soliciting

letters of intent for sponsorship of the project from the state and from the identified local sponsors.

At this time, Commissioner Bjornson withdrew her motion; Commissioner Hutton likewise withdrew his second to the motion.

It was moved by Commissioner Bjornson that the State Water Commission support the Corps of Engineers single alternative, as tentatively selected by the Lower Sheyenne River Flood Control Citizens Committee, which consist of the following six components: 1) a five-foot raise of Baldhill Dam; 2) levees and flood diversion channel at and around West Fargo; 3) flood diversion channel from Horace to West Fargo paralleling the Sheyenne River; 4) ring levees in farmsteads and residencies in rural areas; 5) multiple-purpose dam on Dead Colt Creek; and 6) an increase of flood water storage capability of existing or drained wetlands particularly in reaches from Baldhill Dam to Kindred. The State Water Commission will consider sponsorship of the project subject to securing additional information regarding the project in January, 1982. Commissioner Hutton seconded the motion.

The following roll call vote was taken at the call of the question:

Commissioner	<b>Bjorns</b> on	-	aye
Commissioner		-	aye
Commissioner	Larson	-	aye
Commissioner	Hutton	-	aye
Commissioner	Vculek	-	aye
Commissioner	Kramer	-	aye
Commissioner		-	aye
Commissioner	Jones	-	aye

The vote was tabulated eight ayes; zero nays. The motion was declared by the Chairman as unanimously carried.

In summary of the previous discussions relative to the Pembina River Study and the Sheyenne River Study, Colonel Badger reiterated that the Corps of Engineers will conduct a study of the

tree line effects on the proposed Pembilier Dam; and, that the Corps of Engineers will continue the study of a basin-wide approach to flood control in the Red River Basin.

Acting Chairman Jones thanked the representatives of the Corps of Engineers for their presentation.

The Commission recessed their meeting at 12:00 noon; meeting reconved at 12:45 p.m. Governor-Chairman, Allen Olson, in attendance.

CONSIDERATION OF COST PARTICIPATION FOR DEAD COLT CREEK IMPOUNDMENT IN RANSOM COUNTY (SWC Project No. 1671)

Dave Sprynczynatyk stated that on June 23, 1981, a request was received from the Ransom County Water Resource District for financial participation in the construction of Dead Colt Creek Dam near Lisbon.

Mr. Sprynczynatyk said that in December, 1976, the Ransom County Water Management District requested the assistance of the State Water Commission on preliminary investigations of a recreational dam on Dead Colt Creek. The State Water Commission completed the preliminary engineering report on the dam in November, 1979. The report indicated that although there were subsurface sand and gravel deposits near the dam site, the construction of the dam would be technically feasible as well as financially feasible. The estimated cost for construction of the dam and recreational facilities was \$1,525,000 not including land costs.

Since that time, the Ransom County Water Resource District has attempted to secure funding for the project. When federal funds from the Land and Water Conservation Fund were not available, the decision was made by the Ransom County Board to pursue the project as a combination recreation and flood control project which generated additional interest from downstream water resource entities including the Red River Joint Water Resource Board and the Southeast Cass Water Resource Board. Because of the potential for downstream flood control benefits, both of these entities have committed money towards this project.

The November, 1979 preliminary engineering report estimated the cost for the flood control and recreation alternative to be \$1,765,000. Adjusting this for 1981 prices, Mr. Sprynczynatyk said that the estimated costs for the dam and recreation facilities would be \$1,900,000. The Red River Joint Water Resource Board will contribute \$500,000; the Ransom County Water Resource Board will contribute \$300,000; the Lisbon Fraternal Order of Eagles will contribute \$100,000; the Southeast Cass Water Resource District will contribute \$100,000; and the Lake Agassiz RC&D will contribute \$100,000 towards the project. The North Dakota State Parks and Recreation Department is also expected to contribute approximately \$200,000 towards the project.

Secretary Fahy stated that when preparing the contract fund for the current biennium, it was estimated that approximately \$250,000 would be required from the Commission to build the Dead Colt Creek Dam as a recreation project. This was included in the budget for the current biennium. In addition, HB-1466 provided \$500,000 to the Commission to aid the Red River Joint Water Resource Board in the construction of flood control projects in the Red River Watershed. Secretary Fahy recommended that the Water Commission grant \$250,000 from the contract fund towards the construction of the Dead Colt Creek Dam as a combination recreation and flood control project, and an additional \$350,000 from the money provided in HB-1466, for a total of \$600,000. He indicated that this would amount to approximately 32 percent of the total construction costs. Normally, the Water Commission grants approximately 15 percent for recreation projects and up to 50 percent for flood control projects. Secretary Fahy recommended that when all final commitments from local sponsors have been secured, the Water Commission will proceed with the final design and upon completion of the final design the overall project feasibility will be re-evaluated.

Mr. Ken Stroh, representing the Ransom County Water Resource Board, discussed the project and explained to the Commission the extensive local support in the Lisbon area for this project. He urged the Water Commission to give favorable consideration towards cost participation.

> It was moved by Commissioner Vculek, seconded by Commissioner Bjornson, and unanimously carried, that the State Water Commission contribute \$250,000 from their Contract Fund and an additional \$350,000 from the money provided for in HB-1466, for an overail total not to exceed \$600,000, for the construction of the Dead Colt Creek Dam as a combination recreation and flood control project. The motion is contingent upon the availability of funds.

CONSIDERATION FOR COST PARTICIPATION IN HOPE AND SUSSEX DAMS IN STEELE COUNTY (SWC Project Nos. 1410 and 1742)

Dave Sprynczynatyk stated that in June, 1981 a request was received from the Steele County Water Resource District and the Maple River Water Resource District for cost participation on

the reconstruction of the Hope and Sussex Dams in Steele County.

In 1974, the Sussex Dam was built by local farmers for flood control. In 1979 the spillway washed out. The proposed work on the Sussex Dam would be to reconstruct the facility for flood protection for agricultural property downstream and adjacent to the Maple River. The dam would be rebuilt as a dry dam, flood storage totalling 1500 acre-feet. The eligible construction costs for this project would be \$152,525.

Mr. Sprynczynatyk stated that the Hope 1970's the dam washed out. The proposed work on the Hope Dam would reconstruct the facility for flood protection for agricultural property downstream and adjacent to the Maple River. The dam would be rebuilt as a dry dam, flood storage totalling 150 acre-feet. The eligible construction costs for this project would be \$42,782. Combining the storage in both dams, it is estimated that the 50-year runoff would be reduced by 66 percent and the 100-year runoff

Mr. Sprynczynatyk said that both of Resource Board and in both cases the Joint Board has agreed to provide 25 percent of the cost and has requested the State Water Commission to provide 50 percent of the eligible cost for construction for flood control projects of this type.

Commission participate in these requests granting 50 percent of the construction cost for the Sussex Dam not to exceed \$77,000, and 50 percent of the eligible construction costs for the Hope Dam, not to exceed \$22,000. In both instances, if funds are approved, the money should come from the funds provided by HB-1466.

Mr. Bennett Rindy, Chairman of the have been very beneficial to the county and requested the Commission to act favorably on financial participation.

> It was moved by Commissioner Hutton, seconded by Commissioner Jones, and unanimously carried, that the State Water Commission grant 50 percent of the construction cost for the Sussex Dam in Steele County, but not to exceed \$77,000 from funds provided for in HB-1466. The motion was made contingent upon the availability of funds.

It was moved by Commissioner Hutton, seconded by Commissioner Jones, and unanimously carried, that the State Water Commission grant 50 percent of the eligible construction costs for the Hope Dam in Steele County, but not to exceed \$22,000 from funds provided for in HB-1466. The motion was made contingent upon the availability of funds.

CONSIDERATION OF COST PARTICIPATION IN SWAN CREEK DIVERSION IN CASS COUNTY (SWC Project No. 847)

Dave Sprynczynatyk stated that in June, 1981, a request was received from the Maple River Water Resource District for cost participation in the proposed diversion of Swan Creek within the City of Casselton. A drain permit has been applied for. The

Maple River Water Resource District held a public hearing and approved the application to drain. It has also been recommended that the State Engineer approve the drainage application.

estimated at approximately \$9,977.60.

Total construction costs have been

Secretary Fahy stated that this request benefactors of the channel change would be residents within the City of Casselton who live adjacent to the existing channel. The source of water for this flooding appears to be storm water runoff from within the city. This being the case, Secretary Fahy indicated that the State Water Commission policy in the past has not allowed for contribution of funds towards this type of project unless it can be shown that additional areas other than residential areas within the city will benefit as well from the project. Basically, throughout history, the State Water Commission's participation in drainage type works has been largely related to agricultural benefits.

In discussion of the policy explained background information on State Water Commission cost sharing policy prior to October 1, 1981.

Mike Dwyer, Legal Counsel for the State appropriation bill for drainage projects in the Red River Valley. Subsequently, the State Water Commission adopted comprehensive cost sharing guidelines for those drainage projects. In 1952, the guidelines were revised. Mr. Dwyer stated that he was not aware of any further written revisions to the cost sharing guidelines since that time.

Mr. Roger Fenstad with Moore Engineering and representing the Maple River Water Resource District, explained the Swan Creek Diversion project. He noted that the channel benefits the City of Casselton only to the extent that a control structure will be installed on the end of the channel. The control structure will be installed only to prevent the backup water from entering the city which does cause some problems. The City of Casselton has stated that they will pay for the control structure. The area is presently in the 100-year floodplain area which does not allow adjacent landowners to build in that particular area. The land is being farmed at the present time.

The Maple River Water Resource Board has been requested by the landowners near the area to clean the old channel out. Mr. Fenstad indicated that the application before the Water Commission is for channel diversion rather than cleanout which is approximately one-half of the cost of cleanout. He said that this project does benefit agricultural land, and the city will pay for those portions of the project from which it will benefit.

In discussion of the Swan Creek Diversion, it was suggested that the staff make a field inspection and further review the application prior to the October 1, 1981 meeting. It was the consensus of the Commission members that action would be tabled on the matter at this time.

> It was moved by Commissioner Jacobson, seconded by Commissioner Larson, and unanimously carried, that action on the Swan Creek Diversion request for cost participation be tabled, and that the staff make a field inspection and further review of the application prior to October 1, 1981 to determine whether additional areas other than residential areas within the city will benefit as well from the project.

CONSIDERATION OF REQUEST FOR COST PARTICIPATION FOR CASS COUNTY DRAIN NO. 15 (SWC Project No. 1071)

Cary Backstrand, Drainage Engineer for the State Water Commission, stated that in December, 1980 a request was received from the Cass County Drain Board for cost participation in the reconstruction of a portion of Cass County Drain No.

15 located in Maple River Township, Cass County. The plans and specifications were developed by the Soil Conservation Service and have been approved by the Commission office. A drainage permit for this project has been approved by both the Maple River Water Resource District and the State Engineer. Construction costs have been estimated at \$65,000.

Mr. Duane Breitling, representing the Cass County Drain Board, explained the historical background of the drain indicating that this is not a new drain facility. This drain was originally established and constructed in December of 1907. The project as now proposed is to reconstruct the facility for the first 2½ miles so that it will conform to the design criteria standards of the Soil Conservation Service and the State Water Commission so that the drain can be properly maintained.

Mr. Breitling, on behalf of the Cass County Drain Board, requested that the Commission act favorable on this request for cost participation in the Cass County Drain No. 15.

Secretary Fahy recommended that the Water Commission authorize cost participation of 35 percent of eligible costs, but not to exceed \$20,800.

It was moved by Commissioner Kramer, seconded by Commissioner Schank, and unanimously carried, that the State Water Commission grant 35 percent of eligible costs for reconstruction of the Cass County Drain No. 15, but not to exceed \$20,800. The motion was made contingent upon the availability of funds.

CONSIDERATION OF REQUESTS FOR COST PARTICIPATION IN RICHLAND COUNTY DRAIN NO. 2C AND RICHLAND COUNTY DRAIN NO. 72 (SWC Project Nos. 1176 and 1545)

Cary Backstrand stated that requests have been received from the Richland County Water Resource Board for cost participation in the construction of Richland County Drain No. 2C and Richland County Drain No. 72. Mr.

Backstrand then proceeded to explain each of the projects. The cost estimate for construction of Drain No. 2C is \$865,000. The approximate cost for Drain No. 72 is \$1,840,828.

Mr. Duane Breitling, representing the Richland County Drain Board, explained that both of these projects involve natural water courses. Drain No. 2C is an extension of an existing legal drain which was superimposed on top of an existing natural water course. The original cost estimates for Drain No. 2C as submitted to the State Water Commission include three phases as designed by the engineer. The first design phase of the project was completed this past spring in conjunction with the Richland County Water Resource Board and the Lake Agassiz RC&D Council.

Mr. Breitling introduced the following members of the Richland County Water Resource Board who were present to express their support of the projects: Elroy Stein, Chairman; Beverly Stone, Vice Chairman; and Jorgen Haugen, Immediate past Chairman.

Secretary Fahy stated that when reviewing the contract fund, it has been determined that a total of \$450,000 was estimated to be available for drainage projects of this type during the current biennium. In view of the rising costs for construction of projects of this type, it was recommended by the State Engineer that the Commission set a limit of a maximum of \$100,000 towards any single drainage project so that the contract fund for drainage is not depleted so quickly. He noted that it may be possible during the later part of the biennium to grant additional funds towards these projects.

> It was moved by Commissioner Jones, seconded by Commissioner Vculek, and unanimously carried, that the State Water Commission contribute 40 percent of the eligible construction costs for the construction of Richland County Drain No. 2C, but not to exceed \$100,000. The motion was made contingent upon the availability of funds.

It was moved by Commissioner Jones, seconded by Commissioner Vculek, and unanimously carried, that the State Water Commission contribute 40 percent of the eligible construction costs for the construction of Richland County Drain No. 72, but not to exceed \$100,000. The motion was made contingent upon the availability of funds.

# NEXT MEETING OF STATE WATER COMMISSION

It was the consensus of the Commission members that the next meeting of the State Water Commission will be held

October 1, 1981 in Dickinson, North Dakota. At this meeting, the Commissioners will be briefed by the engineers on the alternatives for the Southwest Pipeline project.

BRIEFING ON MISSOURI RIVER BANK STABILIZATION PROBLEM (SWC Project No. 576)

Mike Dwyer stated that the State Water Commission is responsible for securing easements for bank stabilization along the Missouri River. He briefed the Commission members of a problem where

an error was made on a survey plat, resulting in the construction of bank stabilization works on property for which an easement had not been secured. An appraiser has been hired to appraise the damages and Mr. Dwyer stated that it appears at this time that the matter will be settled out of court. Mr. Dwyer stated that the Commission members should be made aware of the situation in the event it is necessary for the Commission to authorize expenditure of funds to settle the matter.

the Commission members toured the Pembina River project area.

It was moved by Commissioner Kramer, seconded by Commissioner Jones, and unanimously carried, that the meeting adjourn at 2:30 p.m.

Allen I. Olson Governor-Chairman

ATTEST:

Vernon Fahy () State Engineer and Secretary