

# North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850  
701-328-2750 • TDD 701-328-2750 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>

***Audio Telephone Conference Call Meeting  
Governor's Conference Room - Ground Floor  
State Capitol  
Bismarck, North Dakota***

***February 15, 2013  
10:35 A.M., CST***

## **AGENDA**

- A. Roll Call
- B. Consideration of *Agenda* - *Information pertaining to the agenda items is available on the State Water Commission's website at <http://www.swc.nd.gov>*
- C. ***Mouse River Reconnaissance Study to Meet Federal Guidelines*** \*\*
- D. Other Business
- E. Adjournment

**\*\* BOLD, ITALICIZED ITEMS REQUIRE SWC ACTION**

To provide telephone accessibility to the State Water Commission meeting for those people who are deaf, hard of hearing, deaf and/or blind, and speech disabled, please contact Relay North Dakota, and reference ... TTY-Relay ND ... 1-800-366-6888, or 711.

## **MINUTES**

### **North Dakota State Water Commission Audio Telephone Conference Call Meeting Bismarck, North Dakota**

**February 15, 2013**

The North Dakota State Water Commission held an audio telephone conference call meeting in the Governor's conference room at the State Capitol, Bismarck, North Dakota, on February 15, 2013. Governor Jack Dalrymple, Chairman, called the meeting to order at 10:35 a.m., and announced a quorum was present.

#### **STATE WATER COMMISSION MEMBERS PRESENT:**

Governor Jack Dalrymple, Chairman  
Doug Goehring, Commissioner, North Dakota Department of Agriculture, Bismarck  
Arne Berg, Member from Starkweather  
Maurice Foley, Member from Minot  
Larry Hanson, Member from Williston  
Robert Thompson, Member from Page  
Harley Swenson, Member from Bismarck  
Douglas Vosper, Member from Neche

#### **STATE WATER COMMISSION MEMBER ABSENT:**

Jack Olin, Member from Dickinson

#### **OTHERS PRESENT:**

Todd Sando, State Engineer, and Chief Engineer-Secretary,  
North Dakota State Water Commission, Bismarck (not present)  
State Water Commission Staff  
Dan Jonasson, Director of Public Works, City of Minot, ND (via telephone)  
Jason Westbrook, Barr Engineering Company, Bismarck, ND (via telephone)  
Donald Felch, Natural Resources Conservation Service, representing  
Mary Podoll, State Conservationist, Bismarck, ND (via telephone)

The attendance register is on file with the official minutes.

The meeting was recorded to assist in compilation of the minutes.

#### **CONSIDERATION OF AGENDA**

The agenda for the February 15, 2013 State Water Commission audio telephone conference call meeting was presented; there were no modifications to the agenda.

***It was moved by Commissioner Foley, seconded by Commissioner Swenson, and unanimously carried, that the agenda be accepted as presented.***

***MOUSE RIVER ENHANCED  
FLOOD PROTECTION PROJECT -  
APPROVAL OF STATE COST  
PARTICIPATION FOR A RECON-  
NAISSANCE REPORT/SECTION  
905(b) ANALYSIS  
(SWC Project No. 1974-01)***

The Souris River Joint Board has requested the St. Paul District Corps of Engineers to conduct a Reconnaissance Report/Section 905(b) Analysis of the Mouse River basin. The intended purpose of the reconnaissance study is to identify whether or not there is sufficient justification from a federal government

perspective to proceed to the more detailed feasibility study for a potential flood risk reduction project for the Mouse River. The Corps of Engineers could use the study to facilitate federal involvement in a feasibility study for the basin.

The Corps of Engineers has been involved in studying the flood-related problems along the Mouse River and has conducted several major flood risk reduction projects over the past several decades. As with most large scale flood reduction projects, the Corps of Engineers would typically be the logical choice for the study of additional flood risk reduction measures. Specific authorization is required for the Corps of Engineers to initiate any additional studies along the Mouse River. However, there is currently a federal moratorium preventing the Corps of Engineers from beginning new projects, including a new reconnaissance study. Even if funding were provided from a local or other source, this lack of new-start authority would prevent the Corps of Engineers from participating. There are policies that allow the reconnaissance study to be completed by a project sponsor if the study precisely follows the guidelines and procedures established by the Corps of Engineers.

The State of North Dakota and the Souris River Joint Board have expressed interest in initiating the process for assessing if there is a probability for a federal interest for a flood risk reduction project for the Mouse River basin. Undertaking the reconnaissance study at the state/local level, and following the Corps guidelines and procedures, would not only keep the project moving forward but it would also provide engineering points to link up with the Corps when they do get authority.

Barr Engineers consulting team was selected on September 19, 2011 for the Mouse River Enhanced Flood Protection Project. The scope indicated the project work may include support for engineering and design through final design and construction. The objective of conducting a reconnaissance study for the Mouse River basin is to complete the groundwork necessary for the North Dakota congressional delegation and the Corps of Engineers to show justification for a federal budget allocation.

The draft reconnaissance study report will be compiled using existing information such as the content developed during the preliminary engineering report and other previous studies. The intent is not to conduct a detailed analysis but to make the case that a more detailed analysis with federal involvement is warranted. Preparation of the draft reconnaissance report would also involve coordination with the Corps of Engineers to get their input and insight on the project and the process. The estimated cost for preparation of the draft Reconnaissance Report/Section 905(b) Analysis is \$45,000. It is estimated that the report work can be prepared in approximately six months from the Notice to Proceed. See **APPENDIX "A"**, prepared by Barr Engineering Company, dated January 17, 2013, relating to the Mouse River reconnaissance report information, and the Mouse River reconnaissance report proposal.

Based on the understanding that the Corps of Engineers will eventually receive the authority and funding to begin the planning process to determine the federal interest of the Mouse River Enhanced Flood Protection Project, it was the recommendation of Secretary Sando that the State Water Commission approve an allocation not to exceed \$45,000 (100 percent of the cost) from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) for a Reconnaissance Report/Section 905(b) Analysis for the Mouse River Enhanced Flood Protection Project; and that the Secretary to the State Water Commission be authorized to execute a specific authorization under the project engineering agreement for this work.

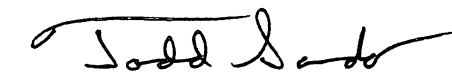
***It was moved by Commissioner Thompson and seconded by Commissioner Foley that the State Water Commission approve an allocation not to exceed \$45,000 (100 percent of the cost) from the funds appropriated to the State Water Commission in the 2011-2013 biennium (S.B. 2020) for a Reconnaissance Report/Section 905(b) Analysis for the Mouse River Enhanced Flood Protection Project; and that the Secretary to the State Water Commission be authorized to execute a specific authorization under the project engineering agreement for this work. This action is contingent upon the availability of funds.***

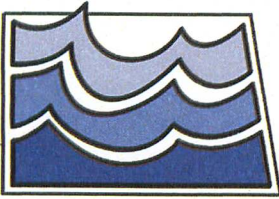
***Commissioners Berg, Foley, Goehring, Hanson, Swenson, Thompson, Vosper, and Governor Dalrymple voted aye. There were no nay votes. Governor Dalrymple announced the motion unanimously carried.***

There being no additional business to come before the State Water Commission, Governor Dalrymple adjourned the audio telephone conference call meeting at 10:50 a.m.



  
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Jack Dalrymple, Governor  
Chairman, State Water Commission

  
\_\_\_\_\_  
Todd Sando, P.E.  
North Dakota State Engineer,  
and Chief Engineer-Secretary  
to the State Water Commission



# North Dakota State Water Commission

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*Agenda C*

## MEMORANDUM

**TO:** Governor Jack Dalrymple  
Members of the State Water Commission  
**FROM:** *Todd* Todd Sando, P.E. Chief Engineer-Secretary  
**SUBJECT:** Mouse River Reconnaissance Study to Meet Federal Guideline  
**DATE:** February 13, 2013

The Souris River Joint Board's request that the Saint Paul District of the U.S. Army Corps of Engineers (Corps) to conduct a reconnaissance study (properly known as Reconnaissance Report/Section 905(b) Analysis) of the Mouse River basin has met with little success due to the Corps' inability to initiate new Reconnaissance Studies at this time. These studies are the first step in the Corps beginning a project. Currently, the Corps is not funded to begin any additional studies and consequently does not have the authority to start a new one. Even if funding were provided from a local or other source, this lack of new-start authority would prevent them from participating. However, there are policies that allow the Reconnaissance Study to be completed by a project sponsor if the study precisely follows the guidelines and procedures established by the Corps.

The Corps process begins with the Reconnaissance Study. Then, if warranted, proceeds to a Feasibility Study, and then to project development. If we want the Corps participation, we must either wait until they have authority to begin this 3-step process, or undertake it at the state/local level ourselves, coordinating with the Corps and following their guidelines and procedures. This not only would keep the project moving, it would also provide connecting points to link up with the Corps when they do get authority.

Barr Engineers has completed Reconnaissance Studies for the Corps, and is familiar with the process and guidelines. Furthermore, this work is within the scope of our current engineering contract with them. Attached is a proposal to do this study with an estimated cost of \$45,000.

**Based on the understanding that the Corps will eventually receive the authority and funding to begin the planning process to determine the federal interest of the Mouse River Enhanced Flood Protection Project, I recommend the State Water Commission approve an amount not to exceed \$45,000 (100 percent of cost) for a Reconnaissance Report/Section 905(b) Analysis for the Mouse River Enhanced Flood Protection Project from the funds appropriated to the State Water Commission in the 2011 – 2013 biennium. The Chief Engineer is further authorized to execute a Specific Authorization under the project engineering agreement to cover this work.**

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Attachment

## Memorandum

**To:** Tim Fay, Dave Ashley  
**From:** Jason Westbrook, Bill Forsmark, Bill Spychalla  
**Subject:** Mouse River Reconnaissance Report Information  
**Date:** January 17, 2013

This memo provides a general description of the work tasks, deliverables, schedule and cost estimate that can be expected to develop a third party Reconnaissance Study consistent with applicable US Army Corps of Engineers (USACE) guidance. The intended purpose of the Reconnaissance Study is to identify whether or not there is sufficient justification (from a Federal government perspective) to proceed to the more detailed Feasibility Study for a potential flood risk reduction Project for the Mouse River. The USACE could use the study to facilitate Federal involvement in a Feasibility Study for the basin.

### Background

The Barr consulting team (including Barr Engineering, Ackerman-Estvold, Moore Engineering, and CPS) was selected on September 19, 2011 for the Mouse River Enhanced Flood Protection project. The scope indicated the project work may include support for engineering and design through final design and construction.

The USACE has been very involved in studying the flood related problems along the Mouse River and has constructed several major flood risk reduction projects over the past several decades. As with most large scale flood risk reduction projects the USACE would typically be the logical choice for the study of additional flood risk reduction measures. The first step in USACE involvement would be a Reconnaissance Study which identifies whether there is a potential Federal interest in conducting a Feasibility Study for additional measures. However, specific authorization is needed for the USACE to initiate any additional studies along the Mouse River. There is currently a Federal moratorium preventing the USACE from beginning new projects, including a new Reconnaissance Study.

The State of North Dakota and the Souris River Joint Board (SRJB) have expressed interest in initiating the process for assessing if there is a probability for a Federal interest for a flood risk reduction project for the Mouse River basin, and potentially facilitate progress toward completing the Reconnaissance Study while the USACE moratorium prevents them from initiating a Mouse River Reconnaissance Study. Proceeding with a third party Reconnaissance Study could allow the important questions about whether there may be a Federal interest to be answered sooner, and also aid in scoping the work that would be necessary for a Feasibility Study.

A USACE Reconnaissance Study consists of three principal parts and is described in USACE regulations. The first part is a Section 905(b) Analysis or Reconnaissance Report, which assesses the potential for Federal participation in a project.

If the Section 905(b) Analysis/Reconnaissance Report shows that there is a reasonable probability of a Federal interest, the second part of the reconnaissance phase is the preparation of a Project Management Plan (PMP) which describes and documents the studies and analyses that would be conducted in the cost-shared USACE Feasibility Study.

The third part of the reconnaissance phase would be the development of a Feasibility Cost Sharing Agreement (FCSA), which defines how the USACE and the non-Federal sponsor will share the cost and conduct a Feasibility Study.

This memo provides a general description of the scope, schedule, and budget to complete the work necessary to complete the first part (Section 905(b) Analysis/Reconnaissance Report), following guidance and regulations for a USACE Reconnaissance Study. Feedback on the Reconnaissance Report from the USACE will be necessary before proceeding with any evaluations or work on the PMP or FCSA portions of the Reconnaissance Study. The timing and level of effort required from non-USACE entities for the PMP and FCSA will depend in large part on USACE guidance after review of the Reconnaissance Report.

### **Reconnaissance Study Objectives**

The objective of conducting a Reconnaissance Report for the Mouse River basin is to complete the groundwork necessary for the North Dakota Congressional delegation and the USACE to show justification for a Federal budget allocation. This will provide information on the likelihood of Federal



involvement as soon as possible, and would allow the USACE to proceed with the next steps sooner than they would be able to if the Section 905(b) Analysis or Reconnaissance Report were not readily available. At the very least it would provide the USACE with the information necessary to complete the remaining Reconnaissance Study steps more quickly when the congressional and Federal budget constraints allow them to proceed, minimizing potential project delays or rework.

### **Project Scope**

A draft Reconnaissance Study report would be prepared in accordance with USACE Engineering Regulation (ER) 1105-2-100, Planning Guidance Notebook. The goal of the Reconnaissance Study report is to lay the foundation for justifying a USACE Feasibility Study. The report will include an analysis of the potential Federal interest, including a general assessment of the costs, benefits, and environmental impacts of proposed action(s), and an estimate of the anticipated costs for preparing the Feasibility Study report. The main components of the Reconnaissance Study report are:

- Summary of past reports and current studies;
- Discussion of problems, needs and alternatives to address the problems and needs;
- Brief outline of the scope and cost for a Feasibility Study.

The summary of past reports would include the Preliminary Engineer Report (PER) completed in February 2012, design and planning reports associated with the existing Federal project, and information associated with the upstream Canadian reservoirs. Current (on-going) studies include the rural alternatives report being prepared by the Barr team and the draft revisions to the flood frequency analysis and flood insurance studies under development by the NDSWC for FEMA.

The problems, needs, and alternatives discussion tell the story of the flooding problems in the basin and why alternatives to solve these problems need to be pursued. It would describe the study area, summarize the national (Federal) objectives, identify problems and opportunities, state planning objectives and constraints, and describe preliminary plans that have the potential for triggering a Federal interest.

The scoping of a Feasibility Study portion of the report documents critical assumptions, identify major milestones, provide a rough order of magnitude cost estimate, and flag potential issues that will need to be addressed in a USACE Feasibility Study.

The draft Reconnaissance Study report will be compiled using existing information, such as content developed during the PER and other previous studies. The intent is not to conduct a detailed analysis, but to make the case that a more detailed analysis with Federal involvement is warranted. Preparation of the draft reconnaissance report would also involve coordination with the USACE to get their input and insight on the project and the process.

### **Schedule Estimate**

We estimate that the Section 905(b) Analysis or Reconnaissance Report work can be prepared in five to six months from a notice to proceed.

### **Budget Estimate**

The estimated budget range for preparing the Section 905(b) Analysis or Reconnaissance Report work is between \$35,000 to \$45,000. This does not include the Project Management Plan or the Feasibility Cost Sharing Agreement tasks.

February 6, 2013

Dave Ashley  
Souris River Joint Board  
4893 7th Avenue North  
Voltaire, ND 58792

Tim Fay  
North Dakota State Water Commission  
900 East Boulevard Avenue  
Bismarck, ND 58505-0850

**Re: Mouse River Reconnaissance Report Proposal**

Dear Dave and Tim:

This letter describes the work tasks, deliverables, schedule and cost to develop a third party Reconnaissance Study Report consistent with applicable US Army Corps of Engineers (USACE) guidance. The intended purpose of the Reconnaissance Study is identify whether or not there is sufficient justification (from a Federal government perspective) to proceed to the more detailed Feasibility Study for a potential flood risk reduction Project for the Mouse River. The USACE could use the study to facilitate Federal involvement in a Feasibility Study for the basin. For background, we have attached the January 17, 2013 summary memo describing the USACE Reconnaissance Study objectives and process.

A draft Reconnaissance Report/Section 905(b) Analysis will be prepared in accordance with USACE Engineering Regulation (ER) 1105-2-100, Planning Guidance Notebook. The report will include an analysis of the potential Federal interest, including a general assessment of the costs, benefits, and environmental impacts of proposed action(s), and an estimate of the anticipated costs for preparing the Feasibility Study report. The main components of the Reconnaissance Report/Section 905(b) Analysis are:

**Past Reports and Current Studies:**

The summary of past reports and current studies portion of the Reconnaissance Report will describe the engineering history for floodplain management in the Mouse River Valley. It will summarize studies associated with the Upper Souris and J. Clark Salyer wildlife refuge hydraulic structures, the Federal USACE project constructed after the 1969 flood, and the role the upstream Canadian dams play in managing Mouse River flows in North Dakota. This section of the report will also summarize

the work initiated since the 2011 flood, including the Preliminary Engineer Report (PER) completed in February 2012, the Rural Alternatives Assessment to be completed in the spring of 2013, draft revisions to the flood frequency analysis and flood insurance studies under development by the NDSWC for FEMA, and other flood recovery actions being taken by Mouse River Valley communities.

**Problems, Needs and Alternatives:**

The problems, needs, and alternatives portion of the Reconnaissance Report will describe the current flooding problems and needs in the basin and identify the alternatives that could potentially solve these problems. The study area, national (Federal) objectives, problems and opportunities, and state planning objectives and constraints for the basin will be summarized. Preliminary alternative plans that have the potential for addressing the problems and needs and for meeting the Federal interest requirements will be described.

**Scoping of Feasibility Study:**

The scoping of a Feasibility Study portion of the report will describe critical assumptions, identify major milestones, provide a rough order of magnitude cost estimate, and flag potential issues that will need to be addressed in a USACE Feasibility Study.

The draft Reconnaissance Report/Section 905(b) Analysis will be compiled using existing information, such as the content developed for the PER and other studies. The intent is not to conduct a detailed analysis, but to make the case that a more detailed analysis with Federal involvement is warranted. Coordination with the USACE will be maintained throughout the development of the Reconnaissance Report to get their input and insight on the project and the process.

**Schedule Estimate**

We estimate that a Reconnaissance Report/Section 905(b) Analysis can be prepared in five to six months from a notice to proceed. Table 1 lists the major tasks and estimated durations associated with developing the report. Major milestones would be the submittal of a draft report to the SRJB, and submittal of an SRJB approved draft to the USACE.

**Table 1 – Projected Timeline**

Tasks	Weeks																												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	?
1 Notice to Proceed																													
2 Project Setup		█																											
3 Summary of Past Reports		█	█	█	█	█	█	█	█																				
4 Problems, Needs & Alternatives						█	█	█	█	█	█																		
5 Outline for Feasibility Study									█	█	█	█	█	█	█	█													
6 Internal QAQC																	█	█											
7 SRJB Review																				█	█	█	█						
8 Report Revisions																							█	█	█				
9 USACE Review																											█	█	█

**Budget Estimate**

The proposed budget for preparing the Reconnaissance Report/Section 905(b) Analysis is \$43,300. Table 2 provides a summary of the budget estimate by task. The budget includes the development of a draft report, one round of revisions based on comments from the SRJB, and one meeting with the USACE to discuss the draft report and identify next steps.

**Table 2 – Budget Estimate Summary by Task**

Task	Hours	Budget
1 Summary of Past Reports	120	\$ 13,000
2 Problems, Needs & Alternatives	100	\$ 11,000
3 Outline for Feasibility Study	120	\$ 13,000
4 Coordination with USACE	40	\$ 6,300
<b>TOTAL</b>	<b>384</b>	<b>\$ 43,300</b>

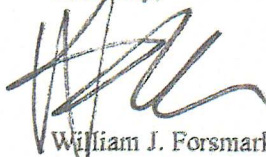
**Next Steps in Reconnaissance Study**

The scope and cost described above is only for the Reconnaissance Report/Section 905(b) Analysis part of a typical USACE Reconnaissance Study, and does not include the development of a Project Management Plan or Feasibility Cost Sharing Agreement. After completion of the Reconnaissance Report/Section 905(b) Analysis, the additional tasks of developing a Project Management Plan (PMP) and a Feasibility Cost Sharing Agreement (FSCA) would be required before a USACE Feasibility Study could be initiated. Ideally, the USACE would have the authority and funding to take over these tasks

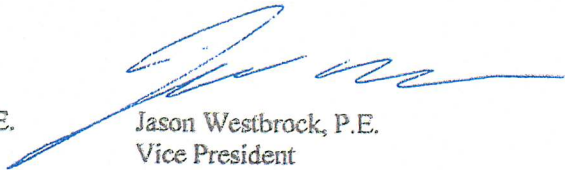
once the Reconnaissance Report/Section 905(b) Analysis has been completed. However, it would be possible to proceed with third party development of the PMP and FSCA tasks. In such an arrangement, the USACE has indicated that they would require significant involvement in the development of these tasks. The desire to proceed with the PMP and FSCA tasks will depend on the findings of the Reconnaissance Report/Section 905(b) Analysis, especially regarding the potential of a Federal interest in additional flood risk reduction measures in the Mouse River basin.

If you have any questions, we would be glad to discuss this with you.

Sincerely,



William J. Forsmark, P.E.  
Vice President  
952-832-2843



Jason Westbrook, P.E.  
Vice President  
701-255-5472

Att:

January 17, 2013 Memorandum: "Mouse River Reconnaissance report Information"