

# Fargo-Moorhead Area Flood Diversion Task Force

## Summary of Meeting

Monday, Nov. 29, 2017

Minnesota State University, Comstock Memorial Union

### PRESENT

- Gov. Doug Burgum – Governor of North Dakota
- Gov. Mark Dayton – Governor of Minnesota
- Del Rae Williams – Mayor of Moorhead, MN
- John Strand– Fargo City Commissioner
- Ron Bergan – Fargo business leader and entrepreneur
- Tim Fox – Former Wilkin County Attorney
- Jason Benson – Cass County Engineer
- Joel Paulsen – Moorhead City Council member
- Nathan Berseth – Richland County Commissioner
- Heidi Durand – Moorhead City Council member
- Tami Norgard – Natural resources attorney
- Mark Anderson – Treasurer of Buffalo-Red Watershed District
- Curt Johannsen – Mayor of Hendrum, MN
- Ken Vein – Grand Forks City Council member
- Jenny Mongeau – Clay County Commissioner
- Bernie Dardis – Greater North Dakota Chamber Board Chair
- Steve Jacobson – Norman County Commissioner
- Craig Hertsgaard – Richland County farmer
- Barb Naramore – Minnesota Department of Natural Resources Assistant Commissioner
- Tom Landwehr – Minnesota Department of Natural Resources Commissioner

### WELCOME

The meeting was called to order at 10:07 a.m.

#### ***Governors' Welcome***

- Governors thanked the members for attending.

### FOLLOW UP QUESTIONS WITH DISTRIBUTED STORAGE

#### ***Questions with Charlie Anderson, Independent Engineer***

- Mr. Anderson reviewed the points he made during the previous Task Force meeting. Commissioner John Strand noted a Minnesota diversion was a “non-starter.” Mr. Anderson noted that a Minnesota diversion had less impacts. There was discussion about this.
- Mayor Williams asked about the suggestion to move the dam four miles north. Mr. Anderson said he encourages keeping floodplain storage.
- Commissioner Landwehr asked about moving the Diversion channel to the east. Mr. Anderson said moving it may retain some floodplain. Commissioner Landwehr asked how many distributive storage projects were ready to be implemented in Minnesota.
- Commissioner Landwehr noted that projects are evaluated based on the entire package, not one specific component and Minnesota law requires holistic analysis.

- There was discussion about the various changes in impacts as related to moving the diversion channel alignment and southern embankment alignment. Residences, structures, cemeteries, religious places, acres and infrastructure like sewage lagoons were mentioned. There was discussion about land acquisition practices.
- Mr. Lance Yohe noted the biggest issue he sees is reducing risk and damage from flood events. The risk of losing Fargo-Moorhead is too great to rely on 100-year protection with three feet of freeboard. He recommended a solution that gives the ability to fight a flood event larger than 100-year.
- City Council Member Vein asked about compensation for those affected when the Red River Floodway in Manitoba operates. Mr. Yohe said there is a formula that determines the level of compensation for those impacted. Commissioner Mongeau noted that any project will have mitigation.
- There was discussion about a Minnesota diversion and location.

## **ADVISORY COMMITTEE OVERVIEW AND FRAMEWORK**

***Presentation by Technical Advisory Committee that includes Mr. Bob Zimmerman – Moorhead Engineer, Mr. Nathan Boerboom – Fargo Engineer, Mr. Gregg Thielman – Diversion Authority Engineer, Mr. Kent Lokkesmoe – DNR Manager, Ms. Suzanne Jiwani – DNR Floodplain Engineer and Ms. Jill Townley – DNR EIS Manager***

- Mr. Lokkesmoe explained the role of the committee.
- Ms. Townley presented the group had met twice and compiled a list of project components and evaluation criteria. The meetings were open to the public and interested parties attended. She noted that components included increasing the amount of water flowing through town, moving the location of the dam, flowing more water through aqueducts to utilize northern storage areas, and allowing more impacts downstream. The information presented to the Task Force would be based on a 100-year event with the river stage at 35 feet at the Fargo gauge.
- Mr. Thielman explained the western tieback levee that would utilize a ridge to the southwest of Horace. This option was looked at previously.
- Mr. Boerboom explained the changes in impacts when flows through town were adjusted. He explained a chart, based on 100+ years of data that showed the cumulative number of days the Fargo gauge has been at a particular height. He noted that flowing more water through town would require more protection within the cities. Commissioner Mongeau asked if the dam would be the same size for the various flows. Mr. Boerboom said it would be the same size. It was also noted the maps assume the only levees in town are the existing ones.
- Mr. Lokkesmoe discussed the levees only option. He noted that the option would protect to a 100-year event, but at some point between that and a 500 year event, would be overtopped. He also noted the impacted upstream acres decrease, but impacted structures goes up significantly and unprotected structures go up significantly. Mr. Boerboom noted the \$1.9 billion cost for this option does not include any mitigation. It was noted that this would not maintain federal authorization.
- Mr. Thielman explained the four alignments evaluated for the southern embankment.

- Ms. Jiwani outlined changes in project operation that would allow more impacts downstream. She noted the maximum impact is at the gauge in Climax, Minnesota because the channel is narrower in that location. To have zero impact at the Canadian border would require .04 stage increase at Drayton, North Dakota.
- Mr. Zimmerman explained a structured decision page that the task force could use to guide the Technical Committee's further evaluation. He noted the group would prefer to have no more than three options to study.
- There was discussion about raising the flow through town to 39 feet. Mr. Benson and Mr. Hertsgaard discussed the potential of a levee or dam breach at that height. Attorney Norgard asked about impact to emergency services at various levels. Mr. Thielman said that has not been analyzed in detail. Council member Paulsen asked about the impact to bridges.
- Commissioner Landwehr asked about the cost estimate for increasing the flow through town to 37 feet. Mr. Boerboom said the cost was primarily the acquisition of homes, removal, levee and floodwall construction. There could be project savings because staging area would be reduced. Mr. Benson asked where money for internal city protection would come from.
- Mr. Fox asked about prior flood planning and if protection was designed for 39 feet through town. Mr. Zimmerman noted the design was based of the current FEMA floodplain and it would be important ot have protection in place. Currently acquisition for properties needed for protection is entirely voluntary.
- Governor Dayton asked about previous funding for flood protection in Moorhead.
- There was discussion about areas impacted by flooding with or without the project, and residential areas that are threatened by flooding.
- Discussion about what level to set the flow through town ensued. Mr. Theilman noted that running more water through town would result in diverting less water and there would be other components that would need to be optimized to see if savings is possible.
- Commissioner Landwehr noted a few parameters to test a project against including: minimizing the amount of floodplain taken out by the diversion alignment, minimizing loss of floodplain with the embankment alignment, minimizing use of staging area through the operating plan, retaining floodplain behind alignments possibly by interior cells or development restrictions and the possibility of allowing downstream impacts beyond what has been proposed to date.
- Mr. Fox noted there may be other options in terms of inlet location. Mr. Dardis stressed the importance of protecting Horace.
- Mr. Zimmerman noted distributive storage should be included in any plan if it is in place. Future distributive storage would add to the level of protection. Task Force members agreed.
- There was discussion about the levees-only option. Governor Dayton noted \$800 million from Minnesota to pay for this option would be challenging.
- It was suggested the technical committee look at optimizing the southern embankment and diversion alignment to include storage options and balancing impacts between the states.

- Commissioner Landwehr noted that taking three things into account would be important including minimizing the number of acres removed from the floodplain, minimizing the number of acres and structures that are newly impacted and striving for equity on impact between the states. Governor Burgum noted there should be some consideration for economics and optimizing based on cost.
- There was consensus from the group to incorporate the western tieback levee concept. An eastern tie back levee was suggested.
- There was discussion about the diversion channel alignment. Mr. Thielman noted the group opted to study passing more water through the aqueducts. Curves and bends in a channel require increased maintenance costs. Mr. Dardis noted the natural growth of communities.
- Commissioner Landwehr noted the Minnesota statute states the most viable alternative does not have to be the most cost effective.
- Governor Dayton suggested task force members with detailed ideas should pass them along to the technical committee.
- Mr. Hertsgaard suggested the group review maximums associated with the various components.
- Mayor Johannsen noted the difficulty coming to agreement on a combination of components with so many variables. He suggested reviewing 37 feet through town and optimizing the rest of the components presented. Mr. Bergan moved the task force use 37 feet through town for calculations. There was discussion about this and impacts. Governor Dayton suggested proceeding with the technical committee reviewing the options discussed including internal storage, changing the operation to run more water through town.
- Governor Burgum suggested the group should not consider ideas that impacted Canada. Col. Sam Calkins of the U.S. Army Corps of Engineers said there is a treaty from 1909 that has requirements if a project raises the natural level of water in a waterway. The requirements can take years for a project to be approved. 10 years, he noted, is not an outrageous estimate.
- Commissioner Strand asked if there were implications for the federal authorization if a level higher than 37 feet was used. Col. Calkins noted that would affect the levee safety criteria. He stated 37 feet or a little higher would be okay, but anything much higher would make it potentially difficult to certify the project. There was discussion about this. He also noted that dams are designed to a more stringent standard than a levee. Terry Williams of the U.S. Army Corps noted if the Corps had difficulty certifying a project, it may be difficult to obtain FEMA accreditation as well. There was discussion about previous plans for protection in Fargo, the Corps standards and levee height.

## **MEETING CONCLUSION**

- The group discussed dates for the next task force meeting and technical committee meeting.
- Both Governors thanked the task force members and those who have been working hard on the effort.

The meeting adjourned at 3:14 p.m.