

Fargo-Moorhead Area Flood Diversion Task Force – Technical Advisory Group

Meeting Minutes

Tuesday, Nov. 14, 2017

Cass County Highway Department, West Fargo ND

GROUP MEMBERS PRESENT

- Kent Lokkesmoe – DNR Manager
- Jill Townley – DNR EIS Manager
- Gregg Theilman – Houston Engineering
- Bob Zimmerman – City of Moorhead Engineer
- Nathan Boerboom – City of Fargo Division Engineering
- Suzanne Jiwani – DNR Floodplain Engineering

INTRODUCTION AND GROUND RULES

- Group members and public present introduced themselves
- Noted that the meeting is a working group and the potential modifications document is meant to be a living document.

REVIEW REVISED PROJECT MODIFICATION DOCUMENT

- Made changes to Design Considerations by adding “the protected area” to “Expand internal storage.” Added new bullets to include “Maintain Federal Authorization” and “Ability to fight floods greater than 100-year.”
- Edited the mitigation section by adding an “s” to permits

FINALIZE KEY CRITERIA

- Group discussed each bullet under Key Criteria and edited to prepare it for use in project evaluation
 - The group added various parameters to each criteria including “Y or N,” or “by state/by county” and “Similar, Better, Worse.”
 - Added “Upstream and downstream impacts for 50, 100 and 500-year flood events to the list of Key Criteria. “Impacts at the U.S./Canadian border (0.04’ at Drayton)” was added.
 - The group also added sub-bullets to Bullet A to include FEMA Accreditation and maintaining federal authorization.
 - Added “cost” to the “engineering feasibility” bullet
 - Added sub bullets to “Meets Laws and Ordinances” to identify states and local requirements.
 - Created sub bullets under Minimize Residual Risk to include “Life and Safety – Evacuation (frequency when evacuation needs to take place),” “Length of levee/dam embankment (feet),” “Height of levee/dam embankment (and depth of water along the face of embankment) (feet),” and “Internal floodplain/drainage (Number of systems needed).” Added additional sub bullet of “Dam Breach No-build zone/hydraulic shadow (acres)”
 - Created sub bullets under “Reduce Floodplain Impacts” to include “New acres added to floodplain,” and “existing floodplain acres protected vs acres flooded –

- ND/MN.” Further sub bullets were added under each to evaluate by state and county.
- Created Sub Bullets under “Limit Impacts to structures” by adding “New Structures added to floodplain” and “Existing floodplain structures protected vs. Structures flooded.”
 - The group removed the “Limit Impacts to jurisdictions outside of Cass County, ND and Clay County, MN”
 - The group reviewed the Task Force charter to ensure their key criteria are in line with the document.

DISCUSS ALTERNATIVE COMPONENTS

- The group reviewed the tables handed out at the Task Force meeting on Nov. 13.
- Discussion about alternatives listed on the sheet commenced
 - Ms. Jiwani noted that distributed storage should be a part of any alternative. The group discussed this, and the understood direction set by the task force members during the previous days meeting. Types of distributed storage were discussed including dry dams, dropping levels on existing dams prior to flooding to provide additional storage, retention up and down the basin, tiling and internal storage.
 - Additional alternatives including a smaller diversion channel, flowing more water through town, impounding water inside the protection area, diverting the Wild Rice river, moving the dam on the Red River north were discussed.
 - Ms. Jiwani noted it would be see what the models show effects from 35 feet, 37 feet, 38 feet and 39 feet of water through town with the current project. Mr. Boerboom noted that 38 feet or 39 feet would require large, potentially costly changes. Mr. Zimmerman noted the technical group should gather all the data and provide all the facts to the Task Force. Mr. Theilman said there may be a point of diminishing returns when running more water through town may not reduce the staging area by much. Ms. Jiwani noted the group should know how many miles of levees would have to be redone with if a levee-only option.
 - Evaluating a levee-only alternative was discussed. Ms. Jiwani said the DNR did evaluate a levee-only option and it was screened out early because it did not meet the stated purpose for the State EIS. Mr. Boerboom agreed the group should include it as data to present to the Task Force. Ms. Townley said they would look at the Corps previous analysis of the option.
 - Discussion about various alignments of a diversion channel and the embankment ensued. Mr. Theilman provided a map with embankment alignments evaluated during the Minnesota EIS process. The group agreed they were focusing on evaluating a 100-year flood event. Moving the alignment north of the Wild Rice was discussed. The group discussed studying a hybrid alignment between “North of Wild Rice River Option” and “MNDNR Northern Alignment.”
 - Mr. Boerboom noted there was previous discussion of a no-build zone near the interstate. Mr. Thielman said there are more existing structures near the river as compared to north of Horace. There is a ridge running north of Horace and areas further to the west are less efficient for storage. He noted they would have to study volumes. He also noted there was a previously-studied Storage Area 1 near Horace.
 - Mr. Lokkesmoe asked if storage in the north would be possible. Ms. Jiwani noted she has worked on levees designed to impound water. Mr. Jason Benson noted the area would be fairly shallow due to ground elevation.

- The option of moving the alignment east of the Sheyenne was discussed. Mr. Zimmerman noted that flowing more water through aqueducts could be evaluated. Mr. Theilman said moving the channel alignment in the north may be difficult with concerns like cultural sites and road crossings.
- The group agreed the alternatives that would be evaluated included more flow through town (35 feet, 37 feet, 38 feet and 39 feet), levees only, moving the location of the dam on the Red river (north of the Wild Rice, using the hybrid alignment and adding a Storage Area 1) and northern storage options with the current project and increasing flows in the aqueducts.

SCHEDULE NEXT STEPS

- Mr. Theilman noted dam safety should be discussed with Ms. Jiwani U.S. Army Corps and North Dakota State Water Commission representatives present offered to assist in that discussion.
- The next meeting was set for 11 a.m. to 3 p.m., Tuesday, Nov. 28.

The meeting adjourned at 11:39 a.m.

MEMBERS OF THE PUBLIC PRESENT

- Nathan Berseth, Task Force member
- Tim Fox, Task Force member
- Ken Vein, Task Force member
- Bernie Dardis, Task Force member
- Craig Hertsgaard, Task Force member
- Tami Norgard, Task Force member
- Jason Benson, Cass County and Task Force member
- Ron Bergan, Task Force member
- Randy Gjestvang, ND State Water Commission
- John Paczkowski, Assistant State Engineer - ND State Water Commission
- Aaron Carranza, North Dakota Office of the State Engineer
- Martin Nicholson, CH2M
- Mark Staples, North Dakota Governor's Office
- Tu-Uyen Tran, Fargo Forum
- John T. Shockley, Onstead Twitchell
- April Walker, A. Walker Consulting
- Lisa Gibbens, Rep. Kevin Cramer's office
- Erik Hove, Clay County
- Jeff Ebsch, Cass County
- Terry Williams, U.S. Army Corps of Engineers
- Rocky Schneider, AE2S
- Jessica Lee, Sen. John Hoeven's Office
- Eric Dodds, AE2S
- Greg Thompson, Houston Engineering
- Tammy Jo A. Taft, AE2S