

Fred Schumacher
12104 Red Oak Ct. S.
Burnsville, MN 55337
fredschum@gmail.com

Headquarters, U.S. Army Corps of Engineers
ATTN: CECW-P (IP)
7701 Telegraph Rd.
Alexandria, VA 22315-3860

Re: Final Environmental Impact Statement
Fargo-Moorhead Metropolitan Area Flood Risk Management Project

TO WHOM IT MAY CONCERN:

Although the FEIS contains many gigabytes of nested files taking hours to download and only 30 days allowed for evaluation by the public, analysis of only a handful of factors are required to thoroughly reject the Fargo Diversion, as it is commonly called.

A. THE 1871 FACTOR

In Spring, 1871, Northern Pacific Railroad land agent Thomas H. Canfield and surveyor George B. Wright searched for the highest ground available for a crossing of the Red River. The location they selected became the site of Fargo-Moorhead. Without high ground, the railroad crossing would not be there; without the railroad, Fargo-Moorhead would not exist.

Unlike Bismarck and Minot, much of which lie in the bottom of deep river valleys, Fargo-Moorhead is a bump on top of a shallow bowl. Canfield expected Moorhead to be the dominant city, since it is sited on the highest ground around. The latest FEMA flood plain maps show that to be true. Most of Moorhead lies above the 500-year flood plain. Moorhead recently completed measures that will almost completely protect the city from flooding and has done so at a cost one-twentieth of the proposed Fargo Diversion -- all accomplished with local and state funds only.

B. THE EXECUTIVE ORDER 11988 FACTOR

A review of the FEMA flood plain maps for Fargo and Moorhead will immediately indicate what the Fargo Diversion is all about: the protection of new and planned Fargo developments that have moved off the high ground and down into the flood plain, a clear violation of Executive Order 11988, which bans the use of federal funds for floodplain development. The ready availability of high ground, above the 500-year flood plain, in Clay County, Minnesota belies the claim that Fargo-Moorhead has run out of land available for urban development without the Fargo Diversion project.

Appendix D of the FEIS justifies a more southerly location for the diversion inlet by stating: "... the ND alignment is a locally preferred alignment... to accommodate the city of Fargo's current future plans of development..." This statement is a smoking gun that proves the Fargo Diversion, the Locally Preferred Plan, is all about development of the floodplain on the far south side of Fargo, which recently built a new south side high school in it in anticipation of future development.

The Fargo Diversion is functionally a long ring dike, with dry dam and diversion with inadequate bypass capacity. It circles Fargo, as a ring dike would a farmstead. The reduced-size diversion does not have the capacity to handle the Red, Wild Rice, Sheyenne, Maple and Rush Rivers, plus local Red River Valley overland flooding. It attempts to accomplish something never done before, the crossing of five rivers. As the MN DNR emphasizes, it is a high risk project.

C. THE MINNESOTA FACTOR

Although the Minnesota Congressional delegation has given pro-forma support for the Fargo Diversion, this support is quite soft, while Minnesotans to be affected by the project have shown themselves to be quite hostile to it. The idea that Minnesota, which has almost nothing to gain from the project and has much to lose, would provide \$200 million in funding, as suggested by ND Senator Kent Conrad, or the \$350 million figure tossed out in a recent Fargo Forum news article is ludicrous, especially since Minnesota has a long-term fiscal shortfall problem and North Dakota is running budget surpluses. Funding from Minnesota would have to come through a bonding bill, not the general fund. It will not happen.

The Minnesota Department of Natural Resources has determined that the diversion control structure is a Class 1 dam, and as such would need evaluation and approval from the MN DNR. The MN DNR has strong concerns about the Fargo Diversion. Without Minnesota partnership or DNR support, there is no project.

D. THE TAUTOLOGICAL LOOP FACTOR

A small group of Fargo/Cass County individuals has been operating in a feedback loop with the St. Paul District U.S. Army Corps of Engineers to develop the Fargo Diversion. Although public hearings have been held, these have been strictly pro-forma, with no comments recorded. The general public has been blocked out of the decision making process. Because the planning process has been deeply flawed, the product developed is deeply flawed.

This is diametrically opposite to the process that was used to develop the Sheyenne River Diversion, when USACE staff met on a monthly basis with a broadly based, equitably chosen local delegation for six years to hammer out an acceptable flood reduction plan that produced maximum benefits with minimum damages. Even though the Sheyenne Diversion was a much simpler project than the Fargo Diversion, the entire process from the original authorization of the Kindred Dam to construction of the diversion took over three decades. The longer an unachievable project like the Fargo Diversion is held to, the longer the wait for a viable project to provide flood relief.

The Fargo Diversion is so complex that, based on my evaluation of public and elected official comments, very few people understand its implications. Fargo Mayor Dennis Walaker admitted, stating: "I don't think anybody here understands how big of a project this is. This whole process is far beyond the majority of people in this building." (Fargo *Forum*, A3, 10/28/11)

E. THE BALANCE SHEET FACTOR

I've become accustomed to federal projects padding their benefits ledger and minimizing costs and impacts; however, the Fargo Diversion raises this to new levels. Some astronomical flood damage figures and loss of life have been thrown around, ignoring the fact that Fargo-Moorhead sits on a hump and that the river rises slowly. But the greatest flaw lies in not including annual crop damages as a

result of project implementation.

Granted, this is a problem with federal evaluation directives; however, it completely skews the cost-benefit analysis. Farmland is not like a factory. It cannot be moved. When prime, class 1 Red River Valley farmland is taken out of production permanently or temporarily, the cost of land purchase for right of way or one-time easement payment in no way compensates the producer or the local economy from the crop loss. In addition, the fact that federal crop insurance does not pay for man-made damages, severely reduces the rentability or saleability of land affected by the flood pool.

F. THE SOILS FACTOR

The Red River Valley has the youngest, weakest soils in America. The need to keep the bottom of the diversion above the Brenna subsoil horizon is the primary reason for the reduction of the diversion from 32,000 cubic feet per second to 20,000. The use of a 10:1 slope for the diversion levees is another indication of the extremely low weight bearing capacity of the soil.

A bridge has a static load, but a viaduct will experience a load in sheer. I see nothing that gives me any confidence that the Sheyenne and Maple River viaducts will be able to handle the sheer loads of rapidly moving flood waters. Failure of those viaducts will be catastrophic.

The tie-back levees will be designed and built as levees but will operate as dams, without the redundant safety measures of true dams. The clay soils used to build the levees have high coefficients of expansion and are prone to failure when waterlogged. Loads will be asymmetrical with high waters on one side and dry land on the other. Failure of the levees or diversion can result in a Katrina moment, with up to a quarter million acre-feet of water stored only a few miles upstream from Fargo-Moorhead.

Essential soil borings for diversion right-of-way are only now being done in November. Those borings may tell us there is no buildable project as presently designed, but data analysis from the borings will not be available for another half year. This absolutely essential work being put off to such a late date is an indication of the forcing forward of a project not ready for authorization.

G. RECOMMENDATION

First, the planning process has to be fixed. The Sheyenne River Diversion process planning model is an excellent one to adopt. There must be dialogue among the benefitters, the damaged, the Corps, and those who will have to pay for the project.

Second, recognition of the political realities of government funding of public projects at this moment in time and the willingness of the public to assess themselves is essential. You can't build what you can't pay for.

Third, recognize the limits of the land.

Sincerely,



Fred Schumacher
retired farmer