MEMORANDUM

TO:

Dale Frink

FROM:

Michael Noone

SUBIECT:

Devils Lake Flood Infrastructure Expenditure (1994-2011)

DATE:

May 7, 2010

In the 17 years since Devils Lake began its historic rise, local, state, and federal entities have invested heavily in protecting people and places in the basin. The purpose of this memo is to provide, as best is possible, an accurate accounting of the money spent on infrastructure protection, including what is intended to be spent through 2011.

There have been many different agencies involved in infrastructure in the Devils Lake basin. This document breaks out expenditures by agency in some cases, and in general project areas in others. Wherever possible, double-counting expenditures has been avoided.

Expenditures are listed in order of decreasing amounts.

Total Expenditure 1994-2011

DOT		\$341,702,941
Devils Lake Levee		\$172,987,729
FEMA		\$44,400,000
Devils Lake Outlet		\$42,000,000
Corps		\$26,215,000
Rail Repair		\$25,672,737.80
HUD		\$3,000,000
	Total	\$655,978,407.80

DOT

The North Dakota Department of Transportation (DOT) has been a key player in combating the floods rise. Between 1994 and 2009, and through the 2011 construction season, the DOT is expected to have spent approximately \$341,702,000.

State System (1994-2009)		\$149,392,790
County System (1994-2009)		\$25,923,888
BIA (1994-2009)		\$14,800,263
New Construction (Estimate cost 2010-2011)		\$151,586,000
	Total	\$341,702,941

Devils Lake Levee

The Devils Lake levee was first built in 1984. Subsequent lake raises have required periodic expansions and increases in the levee. Cost for the levee has been borne by local, state, and federal entities. Between 1996 and 2009 \$59,987,729 was spent on raising and extending the levee. With the Devils Lake reaching new record highs in the last two years, an additional \$113,000,000 is needed to bring the top of the levee to elevation 1,465' amsl. In general, levee expansions have been funded by a 75% federal cost-share, with the United States Army, Corps of Engineers coordinating the efforts.

Levee Construction 1996-2009 \$59,987,729
Levee Expansion to 1,466-1,469' amsl \$113,000,000

Total \$172,987,729

FEMA

The Federal Emergency Management Agency (FEMA) has been another important partner in battling the lakes rise. Chiefly, FEMA has been involved in purchase of or relocation of structures. While not very active in recent years, with the lake rising to new record levels, it is likely that will become active again.

Acquisition of the City of Churchs Ferry		\$4,000,000
Relocation of BTR Cooperative Elevator in Churchs Ferry		\$11,400,000
500 claims (salvage, relocation, and demolition)		\$28,000,000
and 250 claims for the protection of existing structures		\$1,000,000
Ramsey County rural sewer pipe relocation	Total	\$44,400,000

Devils Lake Outlet

Built by the State Water Commission, the Devils Lake Outlet was completed in 2005, and an expansion of pumping capacity from 100 cfs to 250 cfs will be completed in the summer of 2010. Once the outlet expansion is completed, total expenditures are expected to be \$42,000,000.

Original 100 cfs State Outlet	\$26,000,000
Outlet Expansion to 250 cfs	\$16,000,000
	Total \$42,000,000

Corps

The United States Army, Corps of Engineers (Corps) is another significant partner in flood protection, from studies, to levee protection, to a funding partner. Between 1995 and 2008, the Corps is estimated to have spent approximately \$26,215,000 in federal money.

Federal Outlet Funds (study, design, etc)		\$16,045,000
Ramsey County Sewer		\$850,000
Emergency Operations		\$3,032,000
Hazard Mitigation		\$65,000
Roads Acting As Dams		\$319,000
Devils Lake Water Supply		\$5,904,000
Tot	al	\$26,215,000

Railroads

Rail lines have seen some effects from the previous rise of the lake, with both Burlington Northern Santa Fe and Canadian Pacific Railway being the railroads active in the basin. Significant issues are expected to occur as the lake approaches 1,460' amsl, which may result in completely rerouting trains around the Devils Lake region.

BNSF Rail raise near Churchs Ferry (2001) (28% State Funding)

Canadian Pacific Rail at the City of Devils Lake-Harlowe
(estimated from 2001 Corps EIS when lake hits 1,449' amsl)

Total \$25,672,737.80

HUD

The U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) Programs have spent \$3,000,000 in the Devils Lake basin since 1995.

HUD CDBG

\$3,000,000

Total \$3,000,000