

## 2011 FLOOD DAMAGE ASSESSMENTS AS REPORTED TO THE WATER-RELATED TOPICS OVERVIEW COMMITTEE

This memorandum summarizes the cost of flood damage to infrastructure and potential new funding requests as a result of 2011 flooding in North Dakota as reported to the Water-Related Topics Overview Committee.

### VALLEY CITY

2011 Flood Costs to Protect Valley City	
Emergency dike construction and flood preparation	\$5,170,000
Removal of dikes, sandbags, and debris	1,800,000
Repairs to streets and sanitary sewer	1,750,000
Buildings and utilities	80,000
Total	\$8,800,000

Proposed Investments in Valley City's Future	
Phase 1 buyout program (12 months to 18 months)	\$3,600,000
Phase 2 buyout program (protect Valley City State University and downtown business district) (18 months to 36 months)	\$19,850,000
Permanent flood protection as envisioned by Army Corps of Engineers and State Water Commission (36-plus months)	\$20 million to \$30 million
Higher water treatment costs	\$57,000 to \$130,000/per year

### CITY OF FORT RANSOM

Soils investigation and report	\$30,000
Preliminary engineering report	\$50,000
Levee system	\$5,400,000
Diversion channel	\$2,800,000

### LISBON

2011 flood expenses	\$2,469,508
Reimbursements	1,250,205
Net city costs	\$1,219,302

Potential Future Costs	
Permanent levee	\$11,000,000
Home buyouts	1,600,000
Total	\$12,600,000

### WEST FARGO SHEYENNE RIVER DIVERSION - CHANNEL BOTTOM RESTORATION

State Water Commission	\$3.8 million
Local cost-share	5.7 million
Total	\$9.5 million

### BISMARCK

Army Corps of Engineers expenditures	\$4.2 million
May 23, 2011, through August 30, 2011, expenditures	\$9.9 million
August 30, 2011-2012 expenditures	
Sandbag collection and disposal	\$3 million to \$4 million
Roadway repairs	\$2 million to \$3 million
Water control facility repairs	\$2 million to \$3 million
Meriwether's building	\$175,000 to \$300,000
Levee adjustments, maintenance, and removal	\$3 million to \$5 million
Total	\$20 million to \$25.2 million

**MANDAN**

2011 flood control expenditures	\$2.2 million (local share \$250,000)
Army Corps of Engineers expenditures	\$2.1 million

**MINOT**

2011 estimated flood damages	Excess of \$100 million
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**WILLISTON**

Seepage berm to mitigate risk of boils	\$181,583
Access road improvements	\$185,485
Boil access	\$16,170

**FORT YATES**

Army Corps of Engineers Sitting Bull site and water intake	\$150,000
Causeway riprap protection	\$600,000

**MORTON COUNTY**

Individual assistance from the Federal Emergency Management Agency	\$869,020
Levee and sandbags	\$530,300
Debris removal	\$12,613
Sandbag removal	\$300,000
Graveled road damage	\$475,000
Paved road damage	\$325,000
Timberhaven Drive grade raise	\$400,000 to \$1.2 million

**CASS COUNTY**

2011 flood fighting costs	\$2,567,461
2011 flood repair costs	\$2,939,376

**DEVILS LAKE AND RAMSEY COUNTY**

2011 road repair	\$257.6 million
Department of Transportation new construction 2011-12	\$114.946 million
Devils Lake levee expansion (75 percent federal cost-share)	\$113 million
Devils Lake Outlet expansion to 250 cfs	\$16 million
East end outlet	\$80 million
Tolna Coulee control structure	\$9 million

**ADJUTANT GENERAL**

<b>2011 Estimated State Flooding Costs as of August 29, 2011 - May Be Included in Above Numbers</b>	
State direct costs	\$35 million
State indirect costs	25 million
Public infrastructure	305 million
Individual assistance	91 million
Hazard mitigation program	64 million
Total	\$520 million