



Issues in Brief:

2013 National Weather Service Spring Flood Outlook – Red River at Moorhead

March 21, 2013

Summary: The National Weather Service has issued an update to its flood forecast for the Red River Basin. As of March 21, 2013, there is a 50% chance that the river will reach 38.1 feet, and a 5 - 10% chance the river will reach 41 feet. At the present time, **Moorhead is in a great position.** The City of Moorhead continues to monitor flood forecasts and will continue communication updates with those potentially affected residents and the public.

Moorhead's projected flood impact is low. The City's need for temporary protective measures (clay levees/sandbags) has been dramatically reduced by \$80 million of investments in the past four years financed by the City and the State of Minnesota. As indicated by warming weather conditions and more precise information from the National Weather Service in the coming days and weeks, the City of Moorhead will stage equipment to clear ditch systems of snow, closing storm water gates and monitoring pump stations that protect city infrastructure. The City has 400,000 filled sandbags in storage, which addresses the projected sandbag need even at a 41 foot river crest (5 - 10% chance).

Additional Details:

- With more than 14,000 households in the City of Moorhead, only 7 are affected by a river stage of 38 feet (50% chance) and only 33,000 sandbags are needed communitywide and no city infrastructure is at risk. Prior to the mitigation work that has been conducted in the past four years, the number of homes affected at 38 feet was 140, and 670,000 sandbags would have been required.

- With river stages greater than 38 feet, the differences are even more dramatic:

River Stage (ft)	Top of Levee	Properties affected		Sandbags needed	
		2013*	2009 (estimate)	2013*	2009 (estimate)
38	40	7	140	33,000	670,000
39	41	12	190	63,000	1.15 million
40	42	38	250	163,000	1.9 million
41	43	81	300	361,000	2.5 million

**Estimates are likely higher than actual need.*

- Properties affected at the 41 foot river level (5 - 10% chance) are located in primarily in central and southwest Moorhead.

This information is current as of March 21, 2013.

For additional information or updates: Bob Zimmerman, City Engineer at bob.zimmerman@cityofmoorhead.com /218.299.5390 or Michael Redlinger, City Manager at michael.redlinger@cityofmoorhead.com /218.299.5305.

Issues in Brief is a public document.

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