

PRESENTATION SUMMARY

- Introduction
 - Overview (*M. Ryan*)
 - Geography
 - Living with the Red (*M. Clamen*)
 - Conclusions and Recommendations
- Accomplishment's
 - Improvements in Flood Forecasting (*D. Luna*)
- Mitigation (Structural/non-structural/Policy/Legislation changes)
 - North of the Border
 - Manitoba (*D. McNeil*)
 - South of the Border
 - US Federal (*J. DeHarnais*)
 - US State (Dale Frink)
- Summary
 - What's next (*M. Ryan*)
- Questions



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***Grand Forks, ND
East Grand Forks, MN
Local Flood Damage
Reduction Project***

***Presentation
for the***

***4th International Symposium
on Flood Defence***

by

Judy DesHarnais

6 May 2008

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Presentation Summary



- ✓ 1997 Flood
- ✓ Recovery Effort
- ✓ Flood Damage Reduction Project

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Long History of Flooding



Flooding has been an issue since the early 1800's. The top 5 flood events at Grand Forks were in 1997, 1897, 1979, 1882 and 2006.



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1997 Flood East Grand Forks



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1997 Flood Grand Forks



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1997 Flood Grand Forks



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Flooded Homes in Low Area



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1997 Flood Damages

- ✓ 46,000 people evacuated
- ✓ 8,600 homes damaged
- ✓ Almost \$2 billion in damages



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Emergency Levee Construction Following Flooding



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Road to Recovery



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Challenges to Recovery

- ✓ Low-lying neighborhoods
- ✓ Historic homes along the river
- ✓ Poor soils



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Leadership

“...what makes a community a place to live in is not the buildings, it's the people. Water cannot wash that away, and fire cannot burn that away, and a blizzard cannot freeze that away. And if you don't give it away, it will bring you back better than ever.”

-Mayor Pat Owens April 22, 1997



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Economic Recovery

EGF “Removable” Floodwall



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Improved Stability



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St. Anne's Historic Building



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Greenway



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Riverside Dam

Before



After



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Flood Walls and Pump Stations



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Flood Damage Reduction Project



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2006 Spring Flood

~ 30-year event.



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Lessons Learned Summary

- ✓ Timely decisions and information are needed on recovery and rebuilding
- ✓ Embrace public involvement
- ✓ Work closely with the Project Sponsor
- ✓ Leverage resources from multiple sources
- ✓ Take the opportunity to improve the environment.
- ✓ Be open to incorporating recreation and aesthetics



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