

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—North Dakota (*Dale Frink*)
- Summary
 - What's next (*M. Ryan*)
- Questions

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Post 1997 Flood Accomplishments: North Dakota

ND State Engineer Dale L. Frink, P.E.

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Substantial Progress

- **Project Development**
- **Funding**
- **Coordination**

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Accomplishments: ND Legislation

- **Water Development Trust Fund - 1999**
 - 45% of tobacco settlement revenues to water
 - Bonding for water projects
- **Resources Trust Fund - Oil Extraction Tax**
- **Floodplain management enhancements**
 - 1999 and 2003



Structural Accomplishments: Corps' Projects



- **Grand Forks-East Grand Forks flood control**
 - Substantially complete
 - \$400 M total cost / 50% non-federal
 - \$52 M from North Dakota

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Structural Accomplishments: Corps' Projects

- **Wahpeton flood control**
 - Construction underway - operational
 - \$16 M total cost - \$3.5 M from ND



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- **Baldhill Dam**
 - 5-ft flood pool raise
 - Completed in 2004
 - \$12 M total cost - \$1.3 M from ND



Structural Accomplishments: Maple River Dam



- 60,000 AF temp. storage
- Started in 2004; completed 2007
- \$29.7 M total cost
- \$14.6 M from ND

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Structural Accomplishments: Rural Ring Dikes



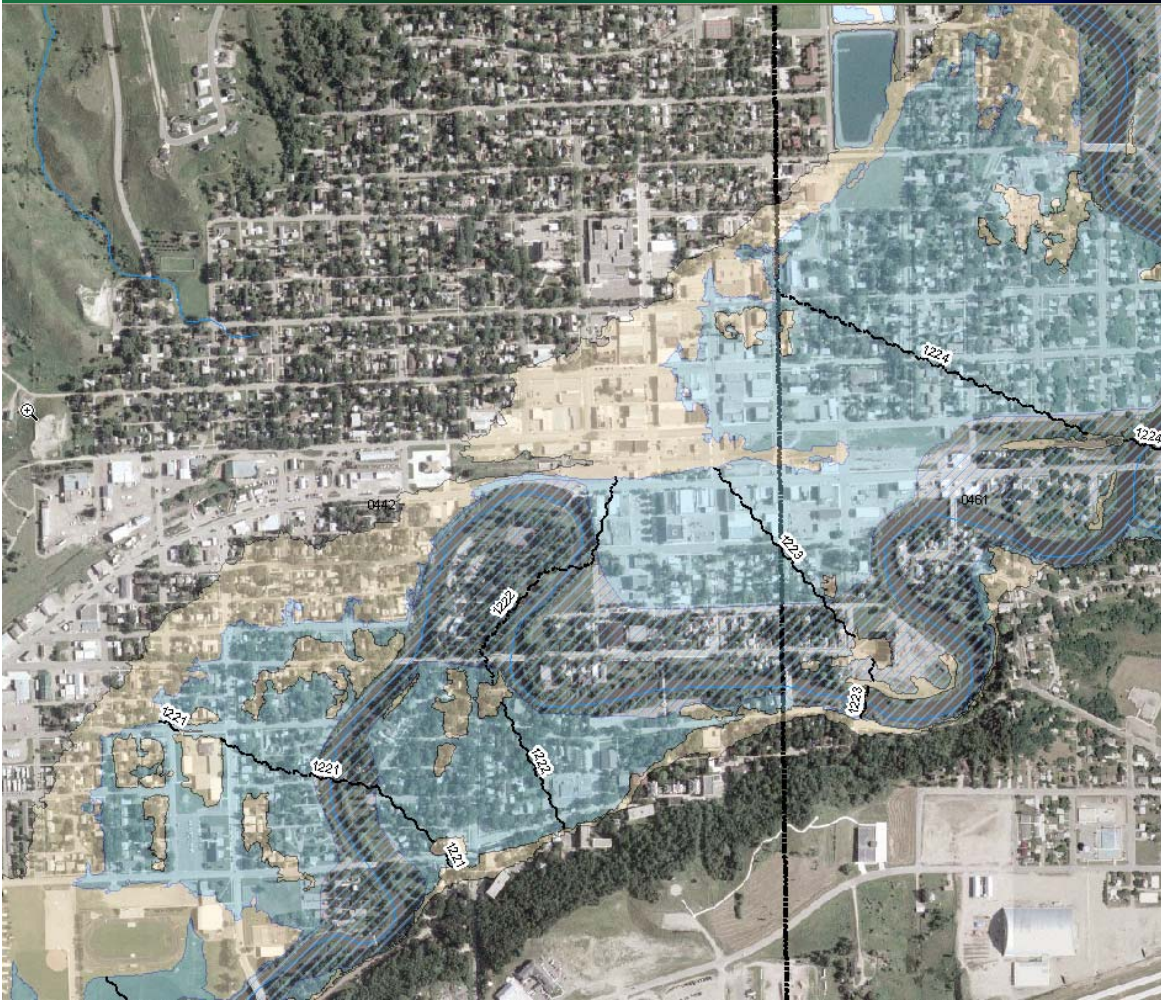
- May 2001: increased SWC cost-share to 50%

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Other Accomplishments:

Floodplain Management - Rec. #13



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- FEMA and ND: Map Modernization
- DFIRMs: 16 counties, 2 communities in progress
- DFIRMs: 4 counties and 1 community completed



Other Accomplishments:

International Cooperation - Rec. #50



- Red River Basin Commission
- International Red River Board

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Other Accomplishments: Waffle Concept - Rec. #1



- EERC completed Waffle study
- EERC concluded Waffle is economically feasible to mitigate flooding in large cities
- More study needed on benefits of mitigating localized damages

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Recommendation #33: Farm Chemical Clean-up/Storage



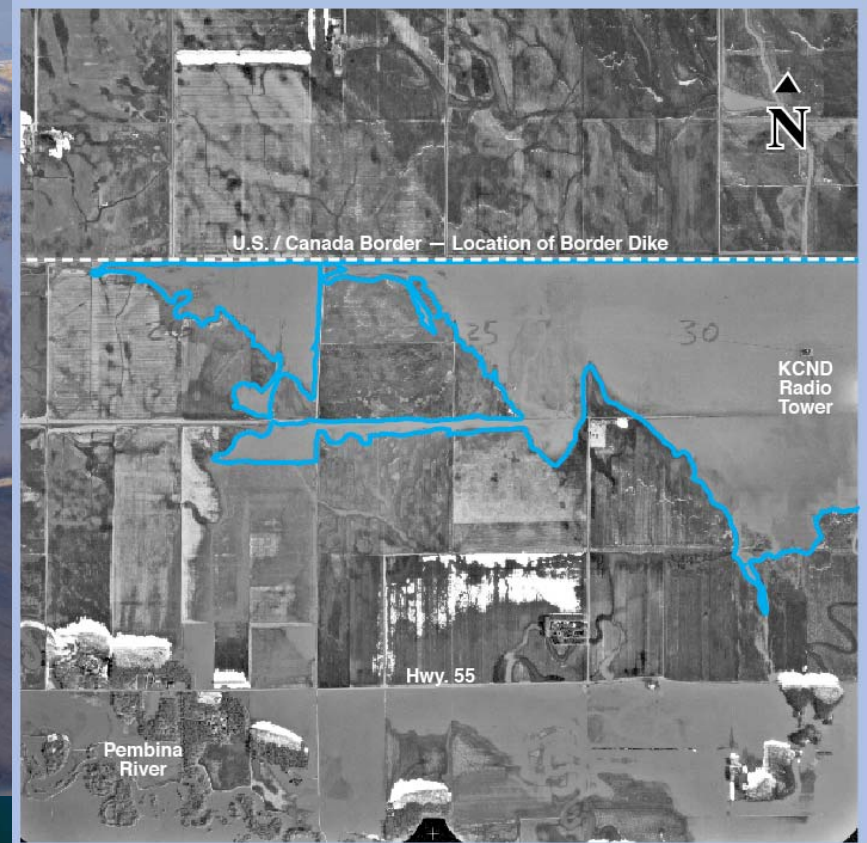
Courtesy
of Dept of Ag

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- Following '97 flood, EPA worked with ND to distribute info regarding farm chemical storage in flood-prone areas in RRB
- Collected about 91,000 lbs. of chemicals in months following '97 flood
- ND Ag Dept's "Project Safe Send" continues



Additional Needs and Gaps

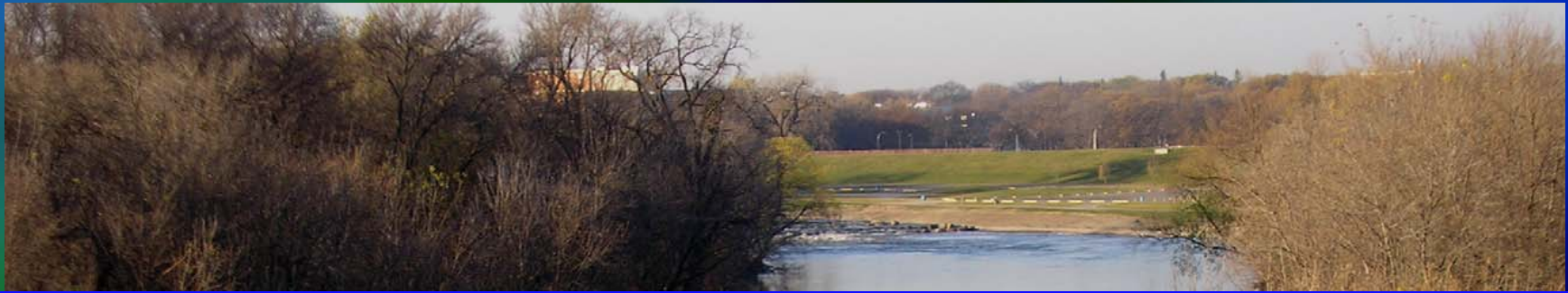


- Fargo flood control
- Grafton flood control

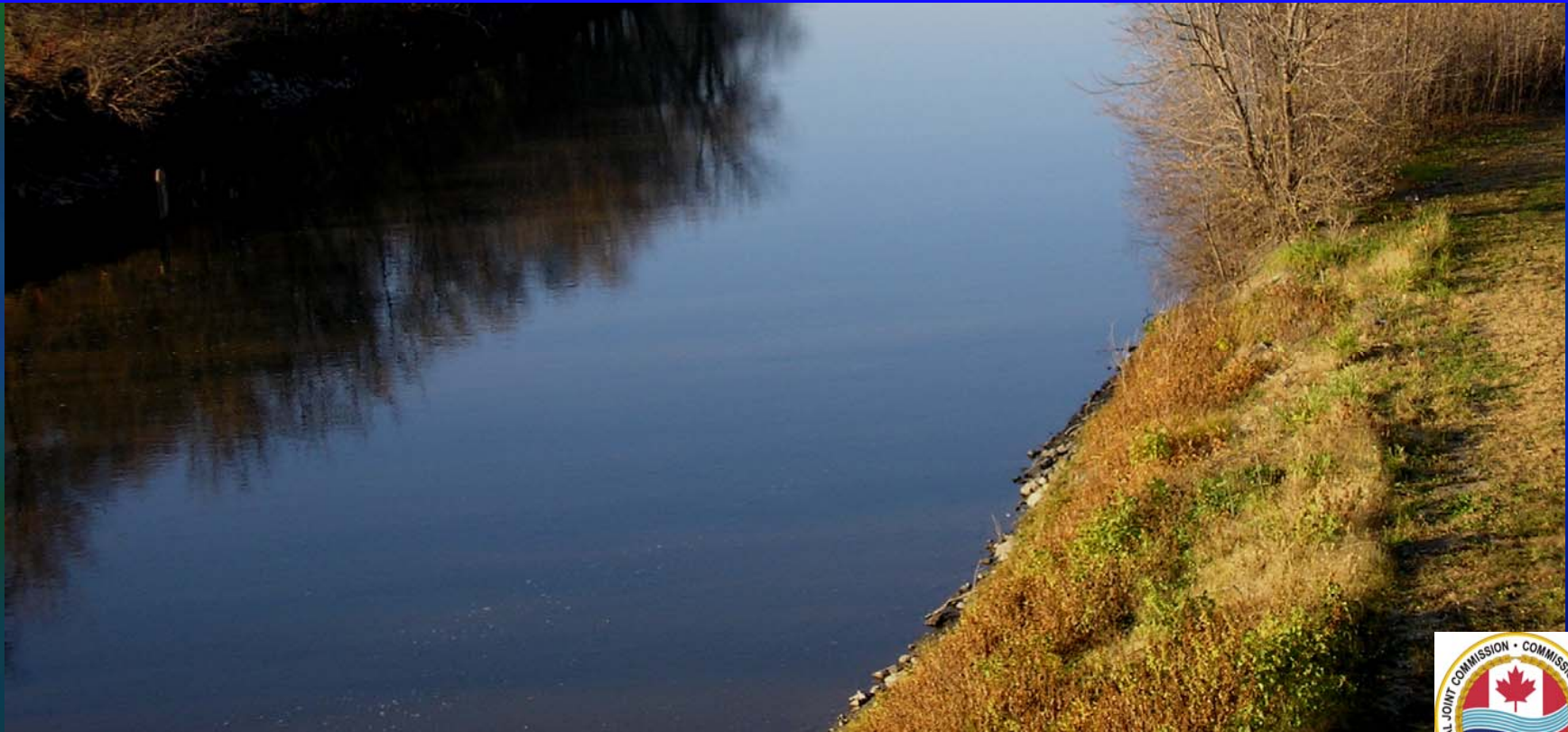
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- More modeling: Red & Pembina
- Border Dike - ND/MB





Great Progress and Still Working!



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