History of Manitoba FDR Activities

March 1, 2006

By

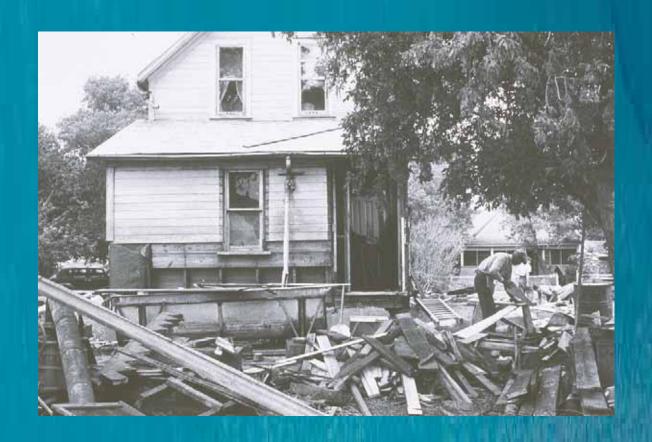
Steven D. Topping, P. Eng.

Executive Director,

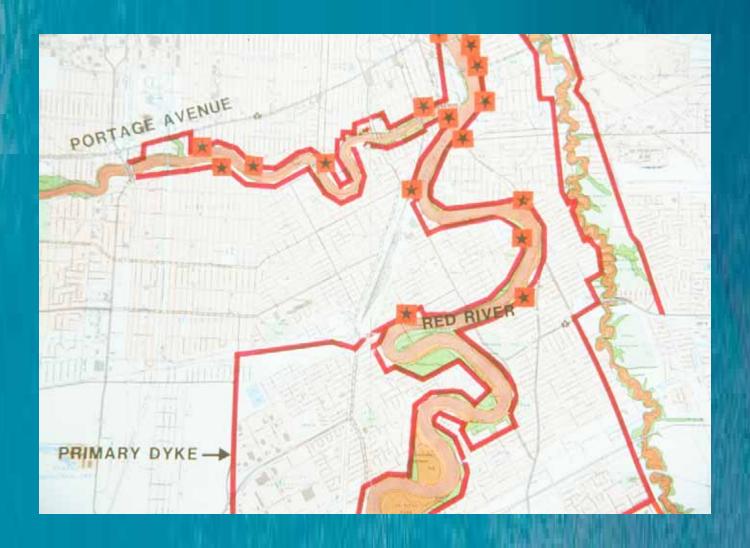
Infrastructure and Operations Division, Manitoba Water Stewardship.



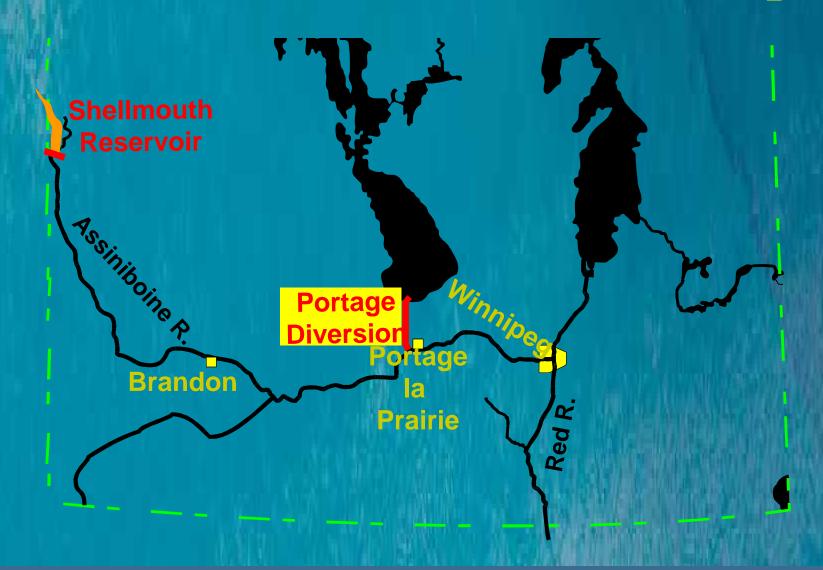
Morris 1950



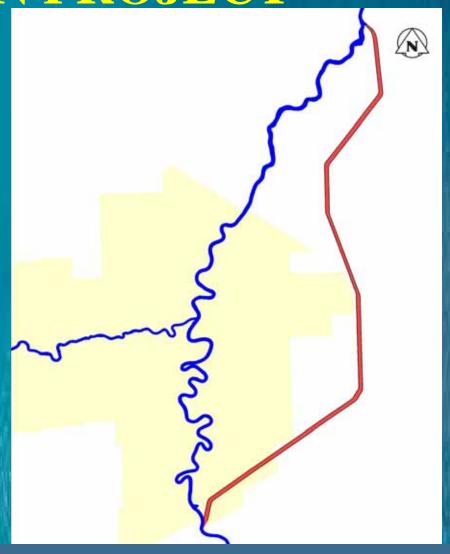
Primary Dikes/ Diking Commissioner Act



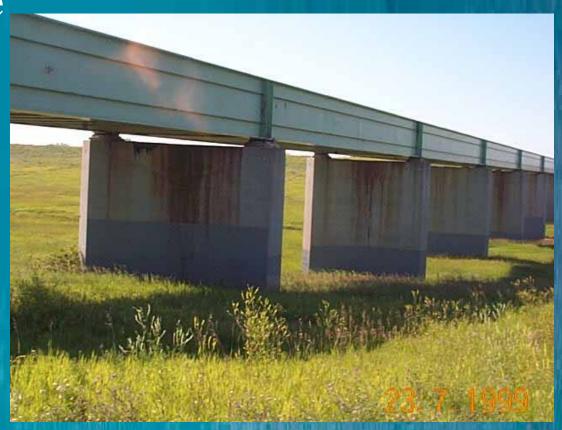
Three Additional Works for Winnipeg



 Expansion of the existing channel to provide a design capacity to pass a 1 in 700 year flood (a reduction in flood risk to Winnipeg to less than one fifth of the current exposure);



 Modification of the 13 bridges, 5 hydro-electric power transmission lines, other crossings, and 7 drainage structures along the channel route;



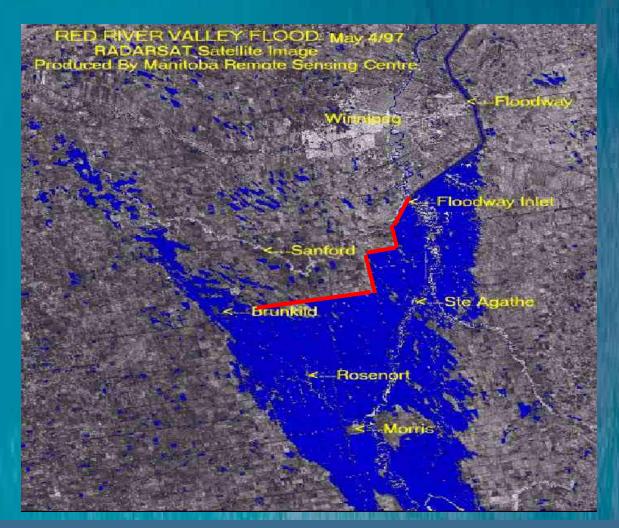
• Expansion of the Outlet Structure and the discharge channel to the Red River;



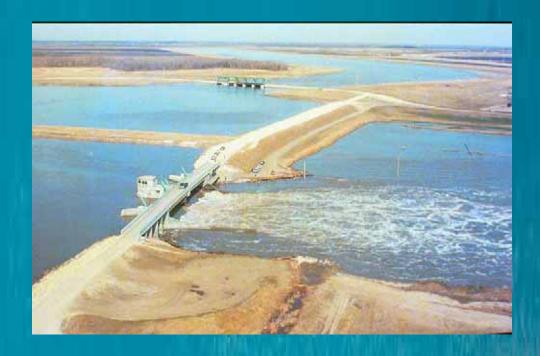
• Improvements to the Floodway Inlet Control Structure;

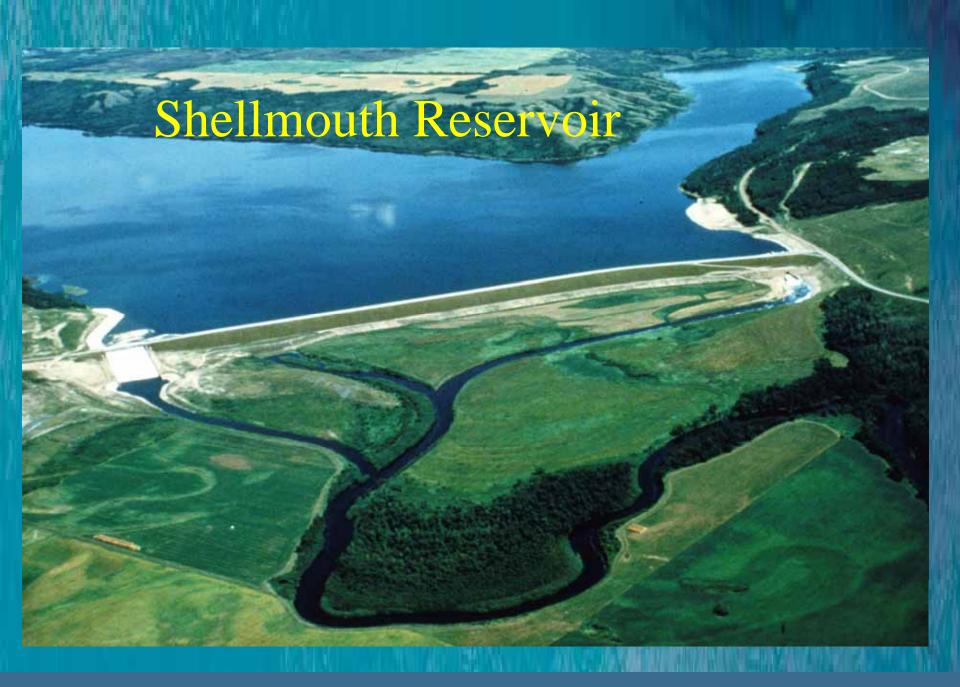


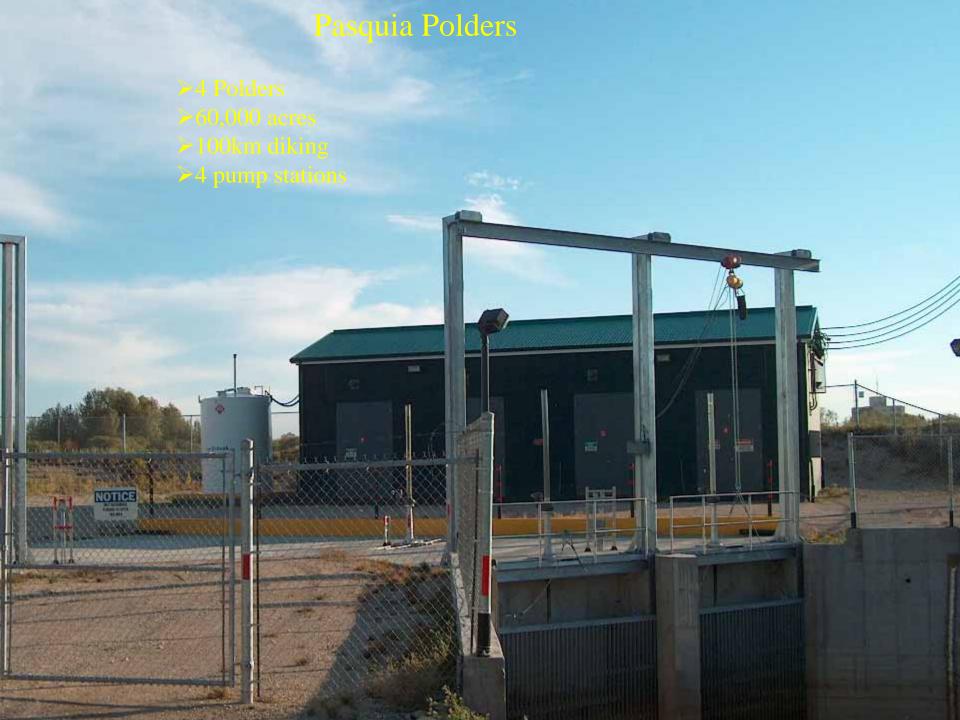
• Increasing the freeboard of the West Dike, with provision of protection from wind effects;

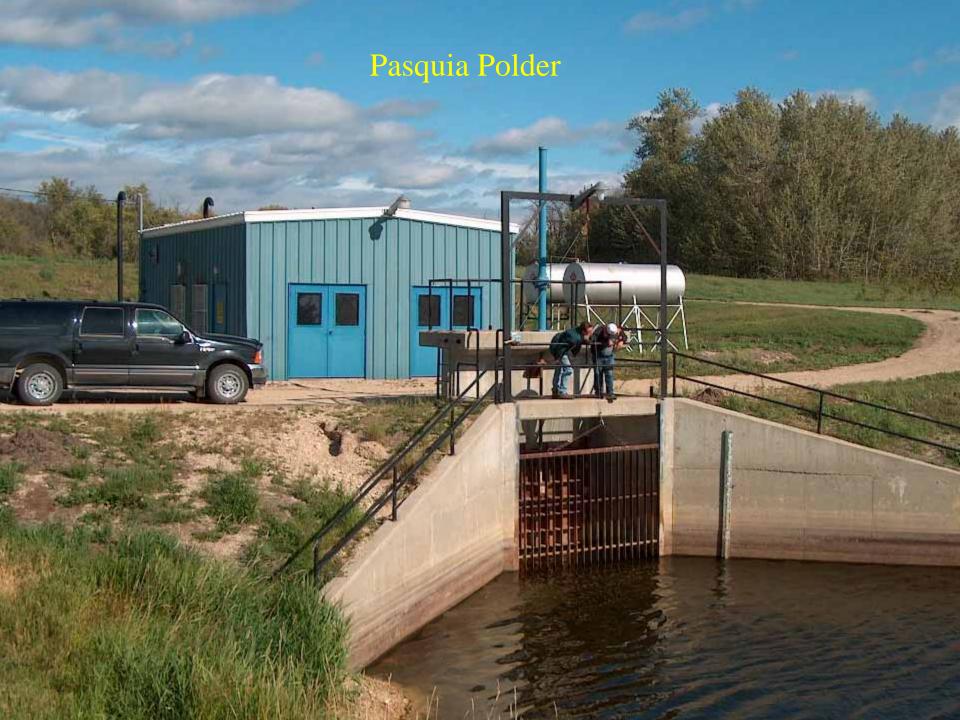


Portage Diversion



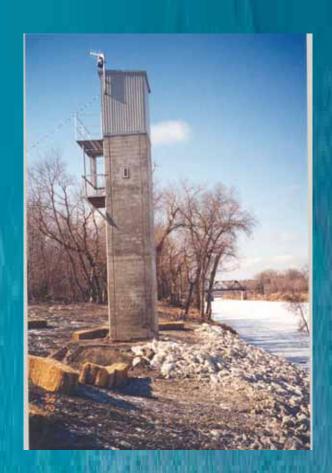




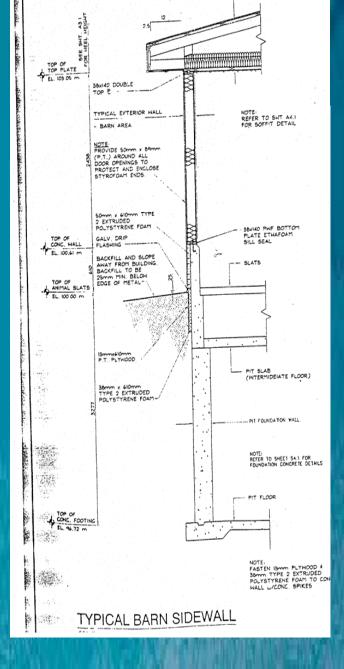


National Hydrometric Agreement





Water Resources
Administration Act
Designated Flood Area
Legislation



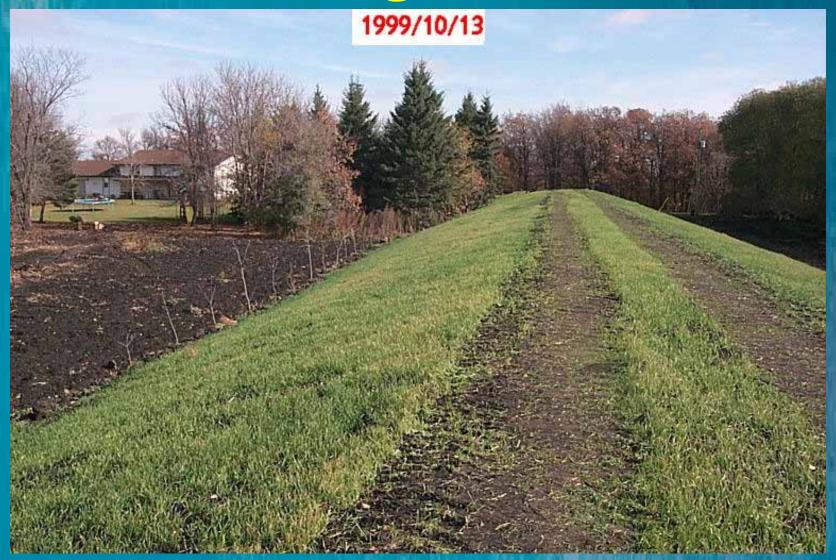
Moving 24/7/2001



Raising

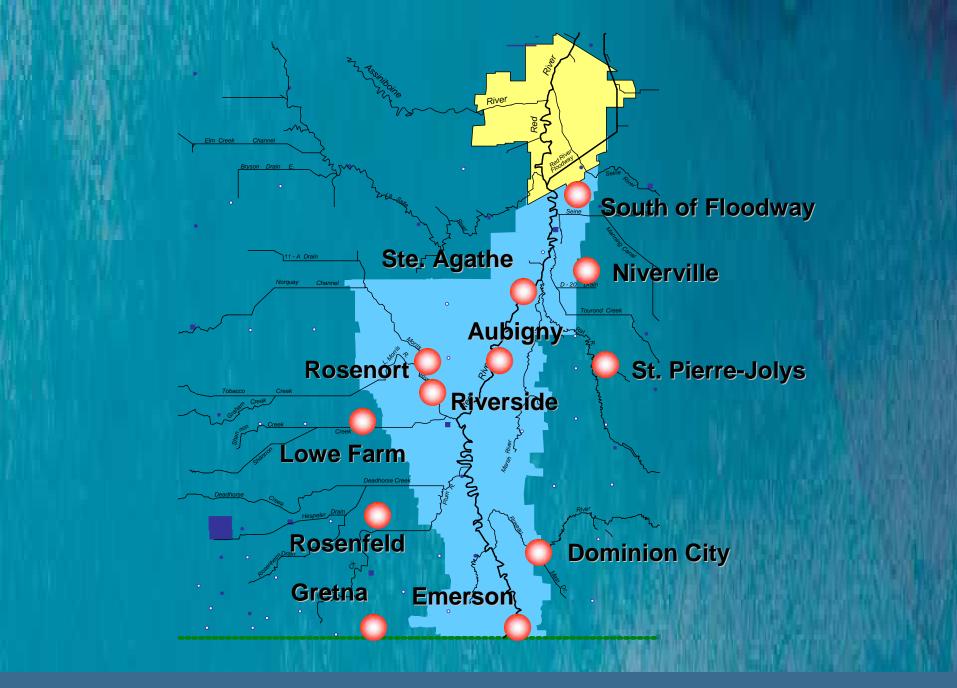


Ring Dike



Structural Dike





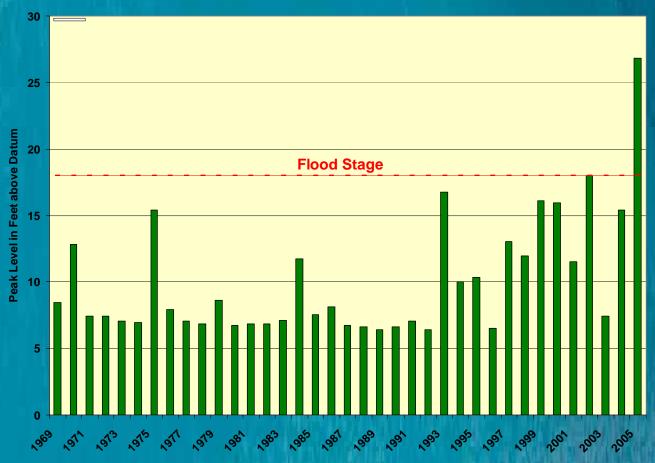
Amphibex

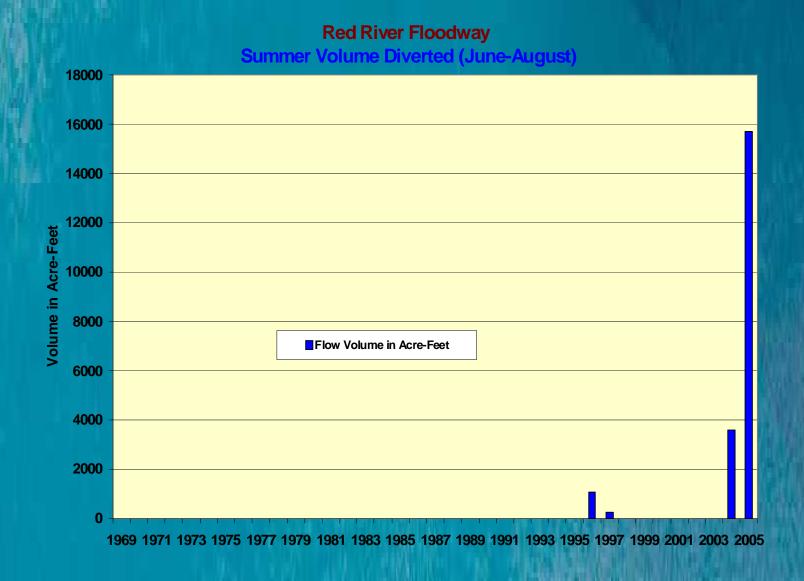


Deloraine 2005









PORTAGE DIVERSION VOLUMES

SUMMER 1970 - 2005

