



Risk

- ✓ The 2009 flood was approximately a 125 year flood event.
- ✓ Successful flood fights lead to a false sense of security.
- ✓ It would be very difficult to fight floods larger than the 2009 flood.
- ✓ Failure of emergency levees would be catastrophic.



**Building of 2nd St. Levee for 2009
Fargo-Moorhead Flood**



Wetter Climate?

✓ Panel of experts met to discuss hydrology

- ✓ Confirmed increasing trend in flood flow and frequency

- ✓ Cause of increasing trend is not known

- ✓ Red River has wet & dry cycles

- ✓ Currently in a wet cycle, but will eventually switch to dry cycle

✓ Recommendations

- ✓ Use non-standard hydrologic method to estimate future flows

- ✓ Assume that continued wet conditions are more likely than dry

✓ Actions taken

- ✓ Corps developed modified flow/frequency curves

- ✓ Will use modified curves for sensitivity analysis of selected plan



Local Decisions

- ✓ **What level of risk is tolerable?**
 - ✓ 36 feet for a 500-year event.
- ✓ **What locally preferred options need to be retained?**
 - ✓ MN 35K, ND 30 & 35K
- ✓ **Identify sponsors for construction and ongoing O&M**
- ✓ **Define non-federal cost sharing arrangements**
 - ✓ Non-federal share of the NED plan will be 35-50% of costs
 - ✓ All costs in excess of the NED plan are 100% non-federal
- ✓ **Develop local consensus**