

The Ripple Effect

Make Each Ripple Count

**Linda Kingery, University of Minnesota
Northwest Regional Sustainable Development Partnership**

What have we heard?

- Cooperation is the key. People can accomplish much more by working together.
- You can make a difference. Even a small action can have a large impact.

What have we heard?

- Take turns breaking the trail. Trust your partner; enjoy your ‘vacation’.
- Be aware that sometimes you can be carried backward by forces beyond your control.
- Live more with less. Do your part to conserve energy, and use energy efficiently and wisely.

What have we heard?

- Water projects should reflect our shared social goals:
 - efficiency,
 - equity,
 - stability and
 - growth (in the GWB)

What have we heard?

- It is time to wake up! Improving water quality is urgent. 10% by 2010.
- TMDLs
- Index of Biological Integrity
- Nutrient Management Zones
- Clean Water Legacy Act
- Erosion Progress Report

What have we heard?

- Abundance of fresh water is easier to manage than scarcity.
- Progress has been made; and still, the stakes are high. Effective water management will be an ongoing challenge to this and future generations.

The Ripples of Floods Past

- Better communication among agencies, and better communication with the public.
- On-line, real-time stage and flow data.
- High tech tools: Flood forecasting, LiDAR, Mike 11, SWAT, GIS
- Not-so-high tech tools for snow water equivalent
- Diversions, dikes, floodways, greenways, upper basin storage.
- \$ Millions and \$ Millions invested in response, recovery, prevention and capacity.

Indications of Future Ripples

- Green infrastructure approaches to water management
 - Stream channel restoration
 - Greenways
 - Wetland restoration
 - Drainage practices that combine conveyance and storage
 - Flow regimes and channel features that support healthy aquatic ecosystems.

Energy Implications

- Growth in US ethanol industry– by 2007, we will double capacity compared to 2005.
- ND expand from 45 MGY to 410 MGY
- Water needs for production and processing
- Evolution to new technologies like cellulosic ethanol.

Making Each Ripple Count

- Change your light bulbs to compact fluorescent
- Recycle more, drive less
- Advance equity in your water management decisions
- Enjoy fishing, canoeing, or boating.
- Adopt the NRFP in your local government.
- Volunteer for a RRBC committee
- What action will you take?