



*Adaptive Management  
for the Navigation & Environmental  
Sustainability Program (NESP)*

**Presentation  
for the**

***Inland Waterways Users Board***

**by**

***Jeff DeZellar***

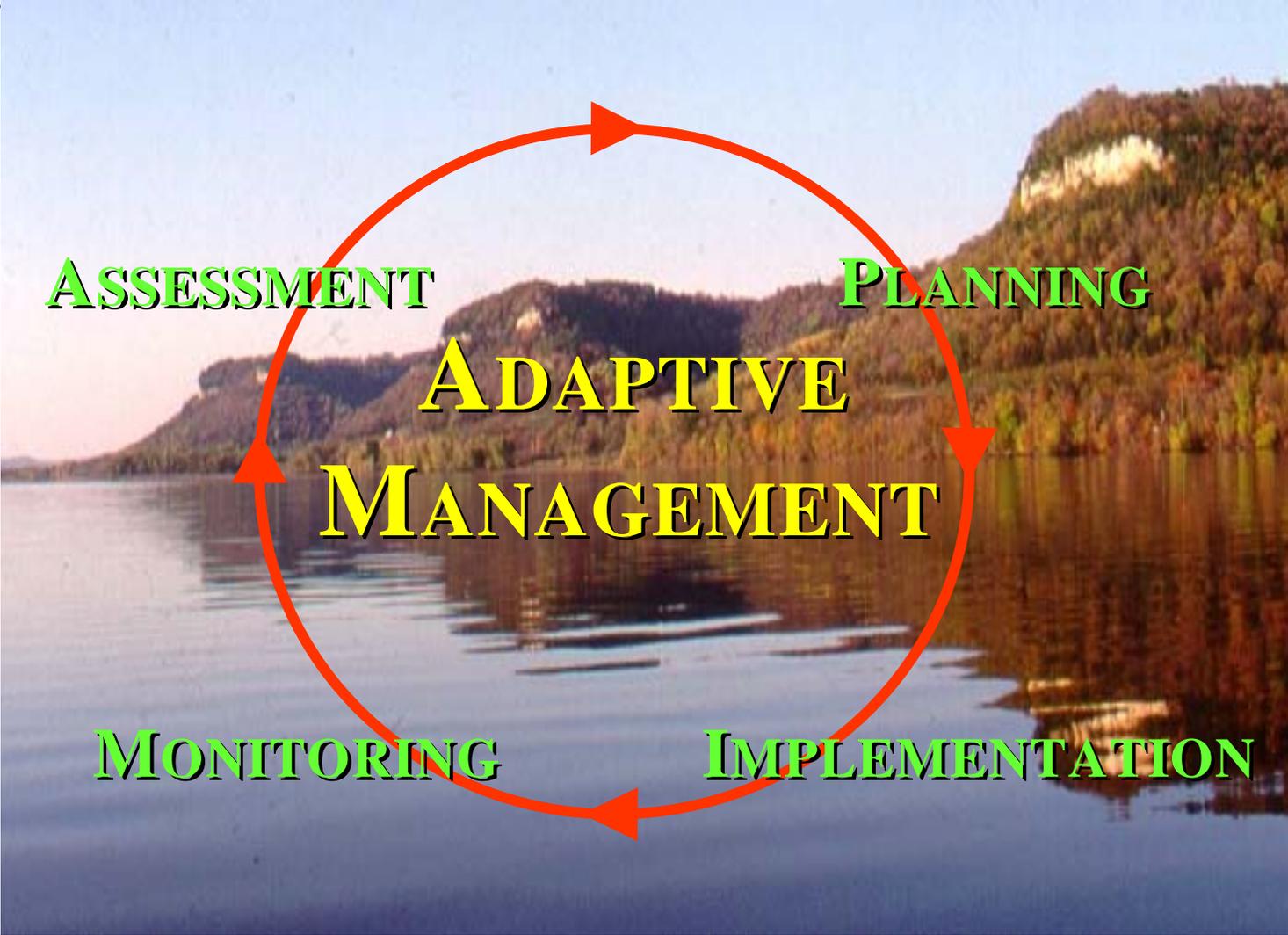
***MVP – Project manager***

***27 July 2005***



# Adaptive Management

- **Adaptive management is the process of refining decisions and projects through continuous monitoring and performance evaluation of actions**
- **“Learning by doing”**
- **Method to manage uncertainty and risk in future actions**
- **Applies to both navigation efficiency and ecosystem restoration**



*One Team: Relevant, Ready, Responsive, Reliable*



# Navigation Efficiency Adaptive Management

- **Acknowledges uncertainty in future demand for waterway transportation**
  - Monitoring river traffic and congestion
  - Monitoring world market conditions
  - Additional economic modeling to refine benefits
- **Attempts to mitigate risk of over-building or under-building of facilities**
- **Feasibility Report calls for continuing evaluation of conditions and trends, with a report to Congress in 5-7 years with recommendations on how to proceed**



# Ecosystem Restoration Adaptive Management

- **Acknowledges uncertainty in ecological response to management actions**
- **Requires continued monitoring and study during implementation of projects**
- **Seek best return on investment and best gains in ecological diversity**
- **Gather additional knowledge to guide future investments in ecosystem restoration**



# Adaptive Management for Pool-Scale Drawdowns

- **A pool-scale drawdown is a lowering of the navigation pool during the summer growing season to promote growth of emergent aquatic vegetation for habitat benefit**
- **Lessons learned from Pool 8 drawdowns (2001-02) are being applied to Pool 5 drawdown (2005)**
- **Intensive monitoring effort being conducted for Pool 5 drawdown**



# Adaptive Management for Pool-Scale Drawdowns

## Questions to be answered:

- How to minimize impacts on commercial navigation and recreational boating?
- How long does “advance” dredging of the main channel last?
- How long does new emergent vegetation persist?
- What species are attracted to new habitat?
- What are impacts on fish, wildlife & mussels?