



# **PRAIRIE**

## RESEARCH INSTITUTE



UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN



**PRAIRIE**  
RESEARCH INSTITUTE

# Building Partners for a Sustainable Kankakee River Basin Future: **Five Truths About Rivers**

**Dr. Brian D. Anderson**  
Senior Deputy Executive Director



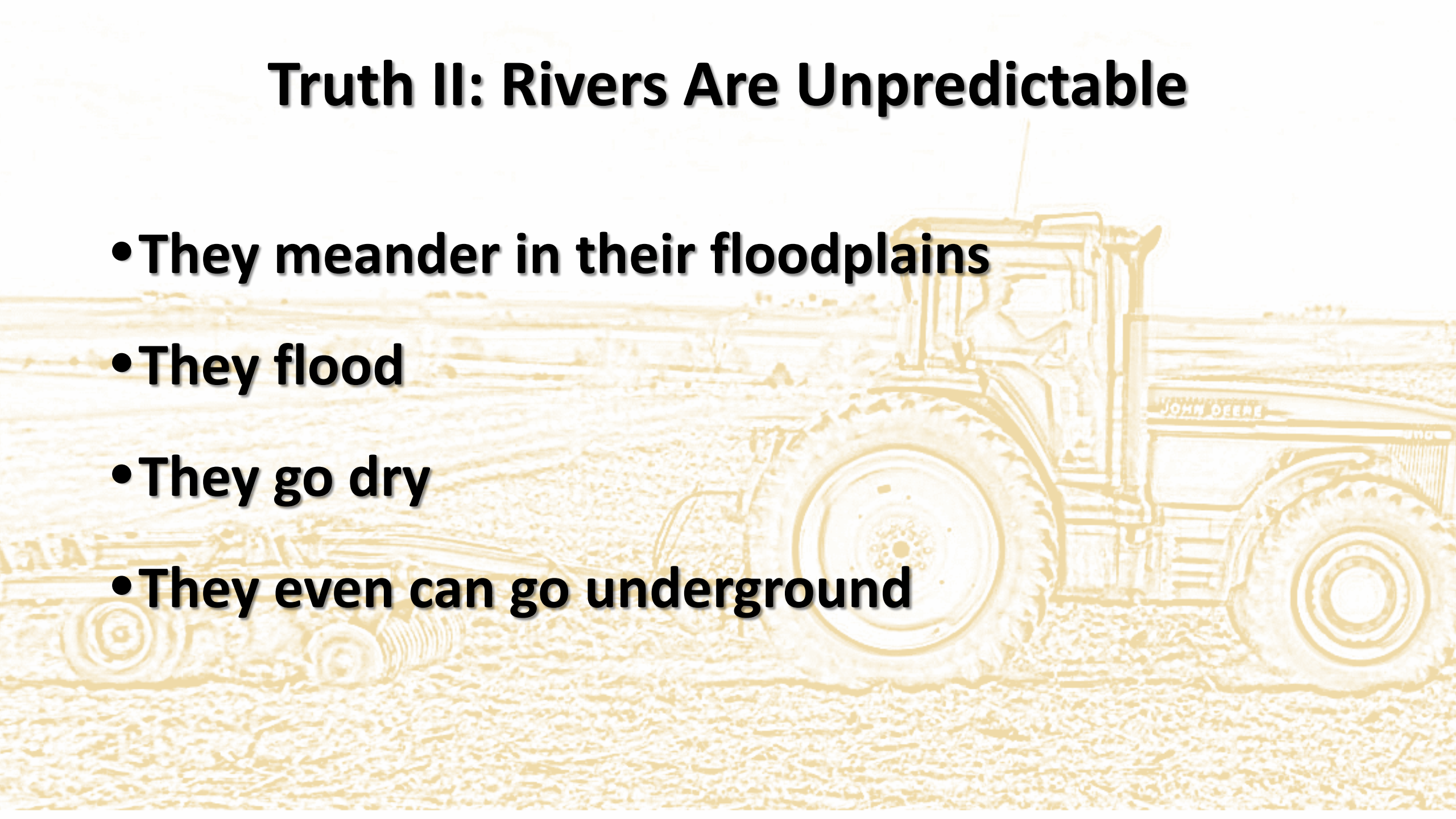
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

# **Truth I: People Have Deep Emotional Attachments to Rivers**

- **90% of human beings live within 10 km of a freshwater lake or river**
- **When archeologists prioritize lands for surveys proximity to freshwater is a primary criterion**
- **Almost all economic activity is to some degree water-dependent, there is a strong positive correlation between a country's freshwater availability and their GDP**
- **Most of us have a river that has run through our lives**

# **Truth II: Rivers Are Unpredictable**

- **They meander in their floodplains**
- **They flood**
- **They go dry**
- **They even can go underground**



# **Truth III: Nobody Can Really Own a River**

- **Because of number 1 everybody wants to own or control rivers, but because of number 2, you really can't, consequently:**
  - **Water law is complex and variable**
  - **Maybe you can "own" the bottom, but rivers meander**
  - **Maybe you can have "rights" to the water in the river, until it flows off your land**
  - **Waters of the United States, until they flow into Mexico, or Canada, or the Great Lakes, or an ocean.**

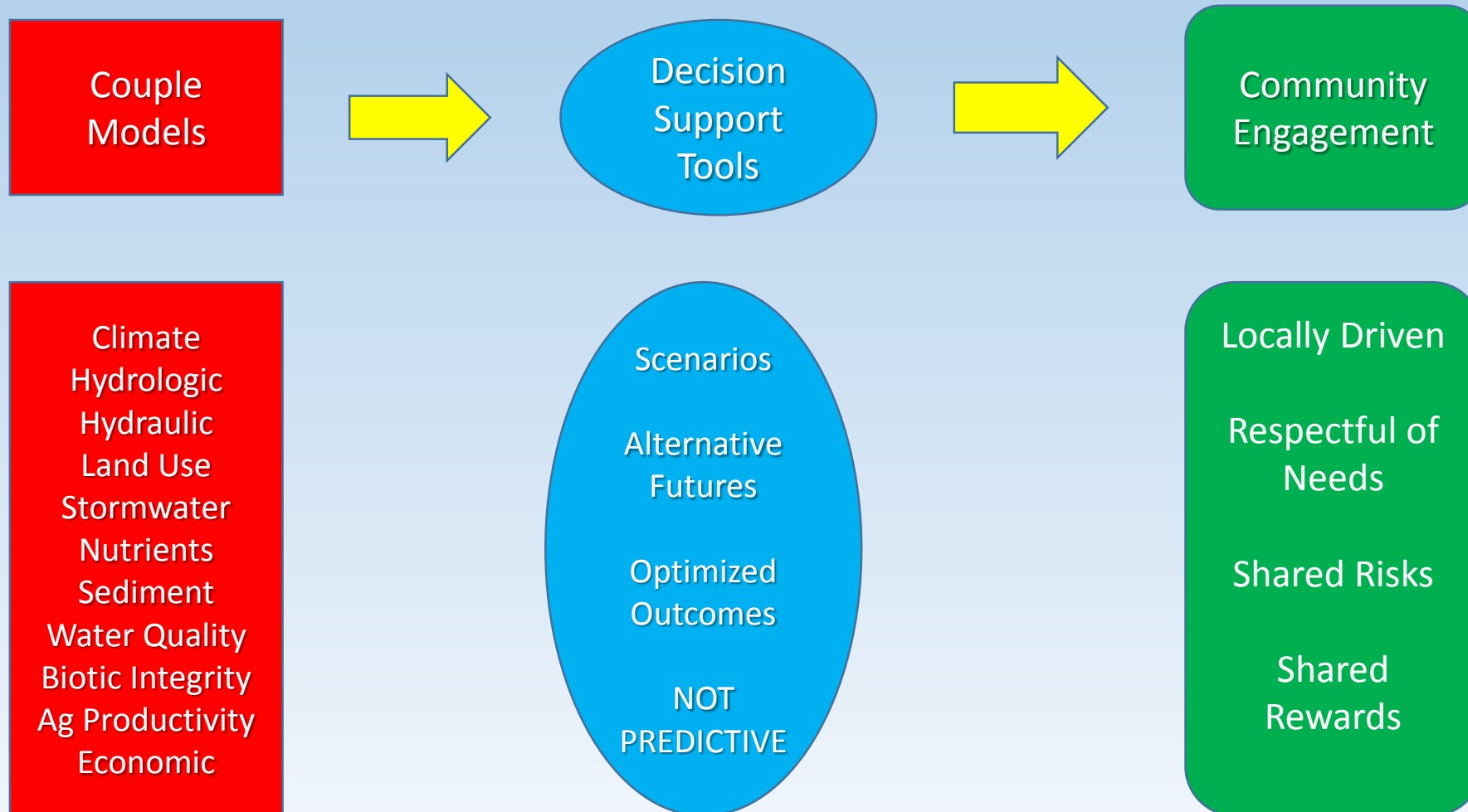
# **Truth IV: We All Want the Most We Can Get From “Our” River**

- **What do you want?**
- **What do you need?**
- **What can you live with?**

# Truth V: We Will Use Whatever Tools Are Out There to Get What We Need (or Want!)

- **Conflict Oriented Tools (Creates Winner and Losers, and **Bad Feelings**):**
  - Legislators
  - Laws
- **Cooperation Oriented Tools (Everybody Wins):**
  - Partnerships, Coalitions, Associations
  - Decision Support Tools
  - Optimization Models

# The Resilient Watersheds Initiative: Coupled Models for Decision Support





# **The Ultimate Truth: One Size Does NOT fit all!**

- **Laws, Rules, Regs, at best only work out for most people, most of the time!**
- **Many Laws, Rules, Regs work out for only a few people, some of the time, so they get changed a lot!**
- **To optimize outcomes for everybody, you need data driven models that predict past events well, so you have confidence future predictions are in the ballpark – run the model a zillion times adjusting the variables and you can look at the range of possible outcomes – hedging your bets to avoid hurting anybody's interests severely!**