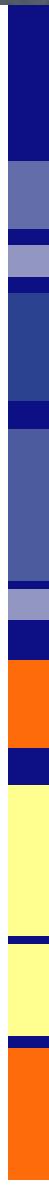


# Improving Science Policy Links

Breaking Walls, Crossing Boundaries

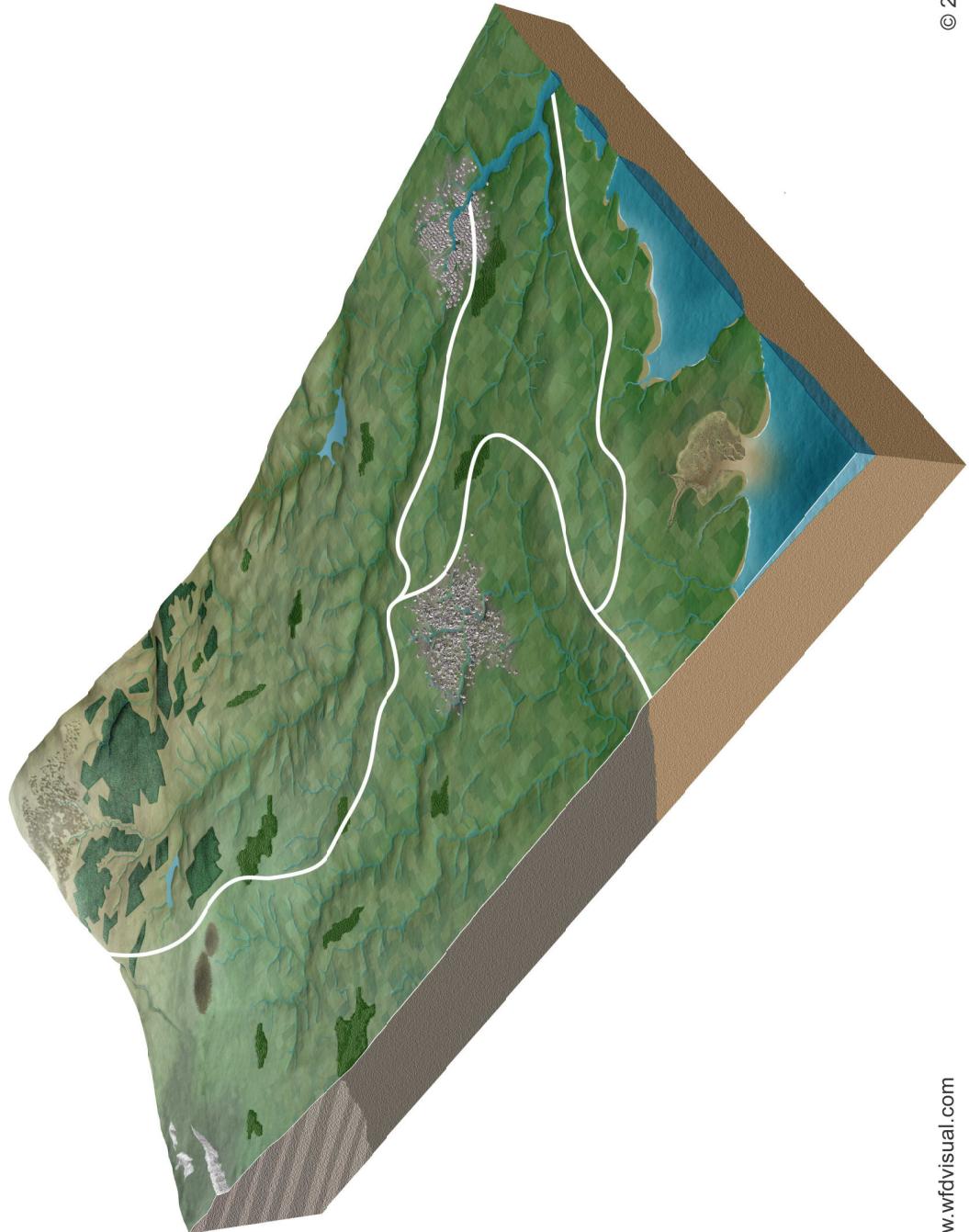


TNO | Knowledge for business



Adriaan Slob

# River basin management



[www.wfdvisual.com](http://www.wfdvisual.com)

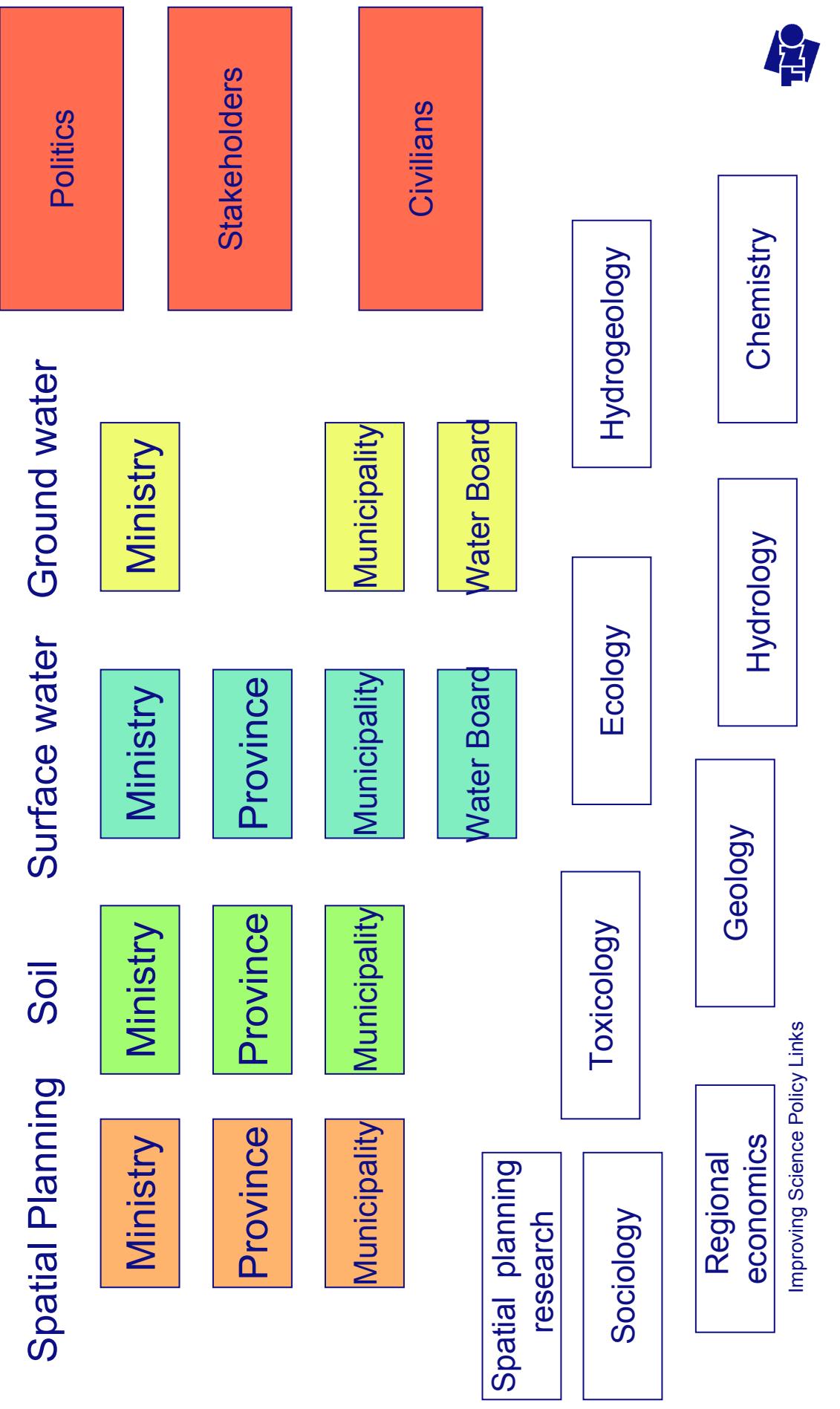
Improving Science Policy Links

# Complexity

- Natural system: surface water- ground water- soil- sediment interactions
  - Social-ecological system: interaction between the natural and human system
  - Government and governance system: many policies involved
- 
- Many influences, interdependencies, and boundaries



# Boundaries in river basin management



# Science-Policy is too simple:

- Fragmentation
  - Many Boundaries:
    - science-science boundaries
    - policy-policy boundaries
    - science-policy boundaries
  - Multifold relationships
  - Tailor made solutions
- 
- How to connect?



# Boundary Spanning Theory

- Boundary **Spanners**: mediators, knowledge brokers,.....
  - Boundary **Objects**: joint papers or policy notes, joint models, joint maps, joint .....
  - **Boundary Spanning Processes**
- 
- Coproduction of knowledge: scientists together with policy makers, stakeholders, etc.



# Example: constructing a ground water model

- Scientists together with policy makers and stakeholders
- Gathering and processing 'general' data, Identifying modelling concepts, Static and dynamic calibration of the initial model

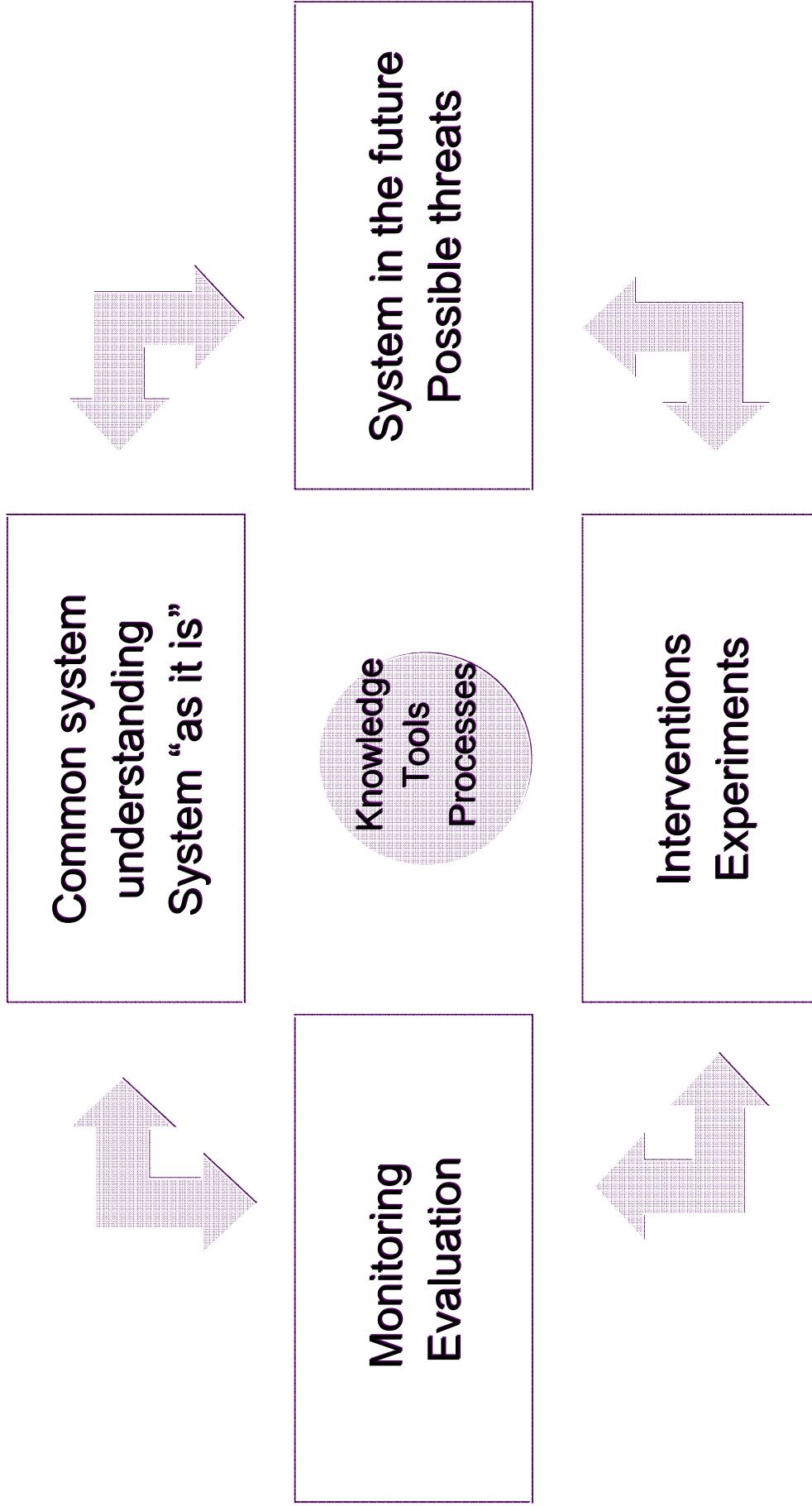


15 half-day  
workshops  
in 12 months

Feedback based  
on local knowledge

Looking into anomalies  
together in the field

# Learning cycle for biophysical/social systems



## Observations from practice:

- Finding common goals and language
- Instruments can help: scenario building, joint visioning, joint problem descriptions, policy games, etc.
- Connections on three levels necessary: professional-management-political board
- Different types of knowledge: procedural, scientific, local knowledge
  - Different roles of knowledge: in preparation, in monitoring, implementation, etc.
- Timing of the two processes: policy process – research process
  - Political influence can hamper the science-policy process
  - Knowledge brokers are important

# Conclusions

- Science – Policy links in a highly specialised world
- Asks for joint processes of knowledge production
- Commitment, dedication and understanding from both sides
- It is difficult
- But it can be done!



**Thank you for your attention!**

