Managing in an era of uncertainty

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and
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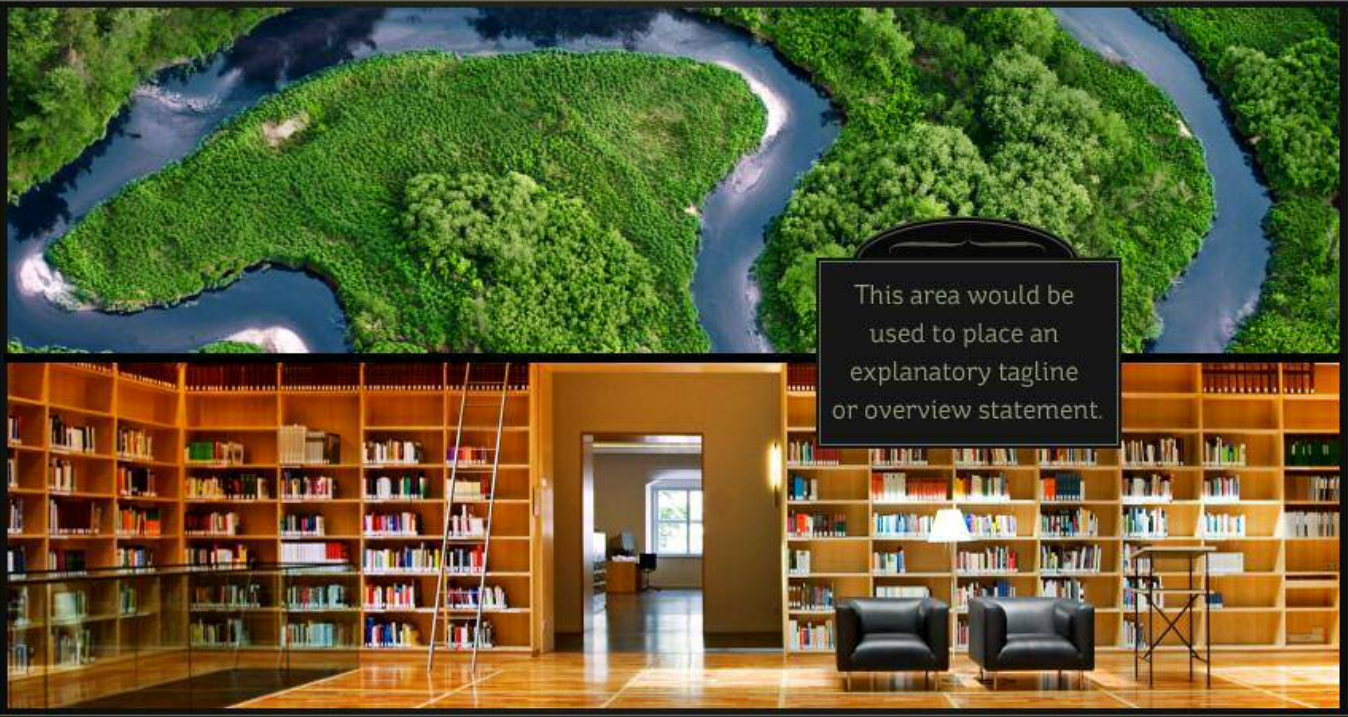
decision support tools water climate change

about 2,310,000 results

CARPE DIEM WEST
ACADEMY



About The Academy

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What's New!

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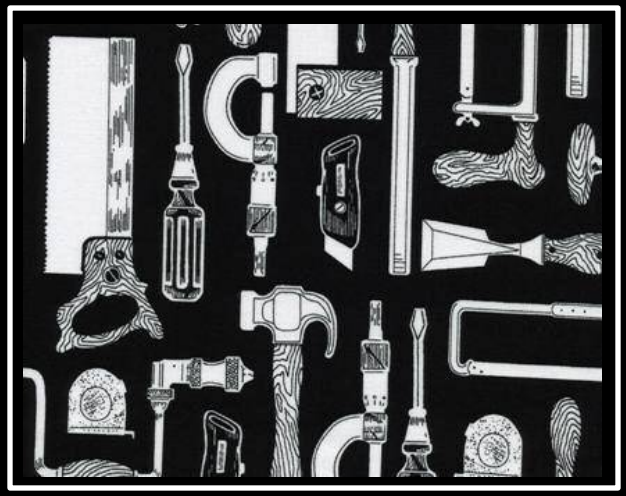
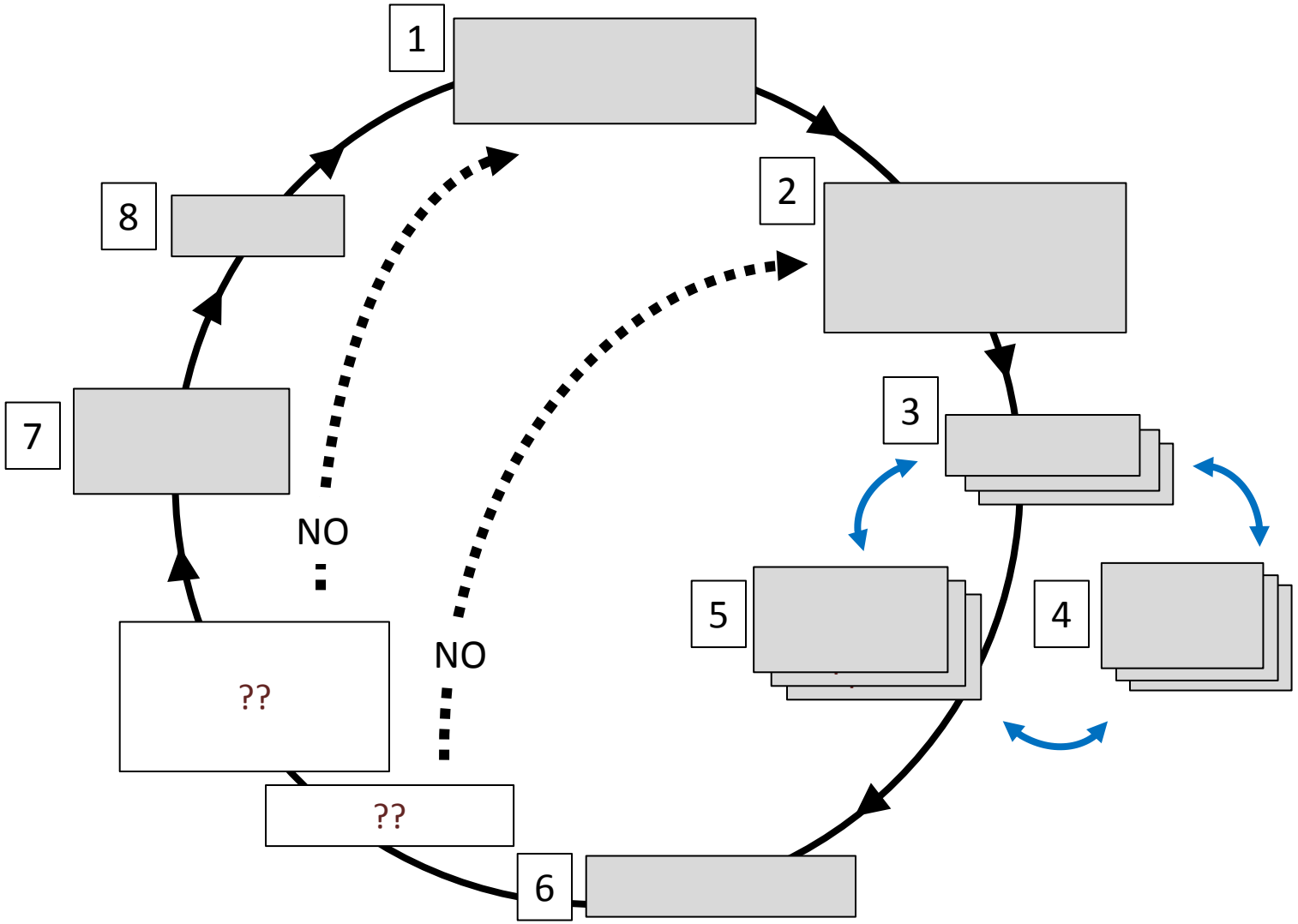
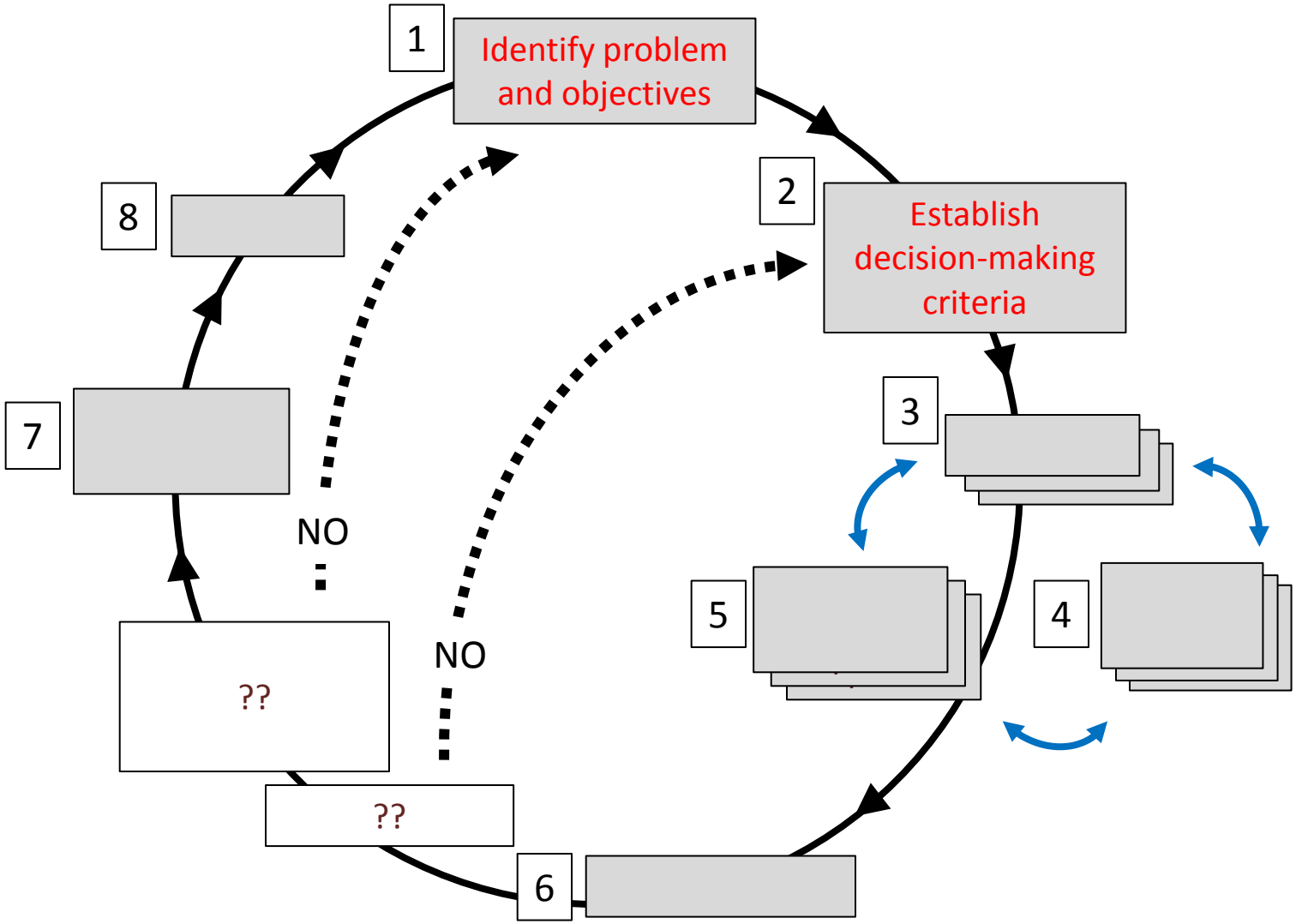
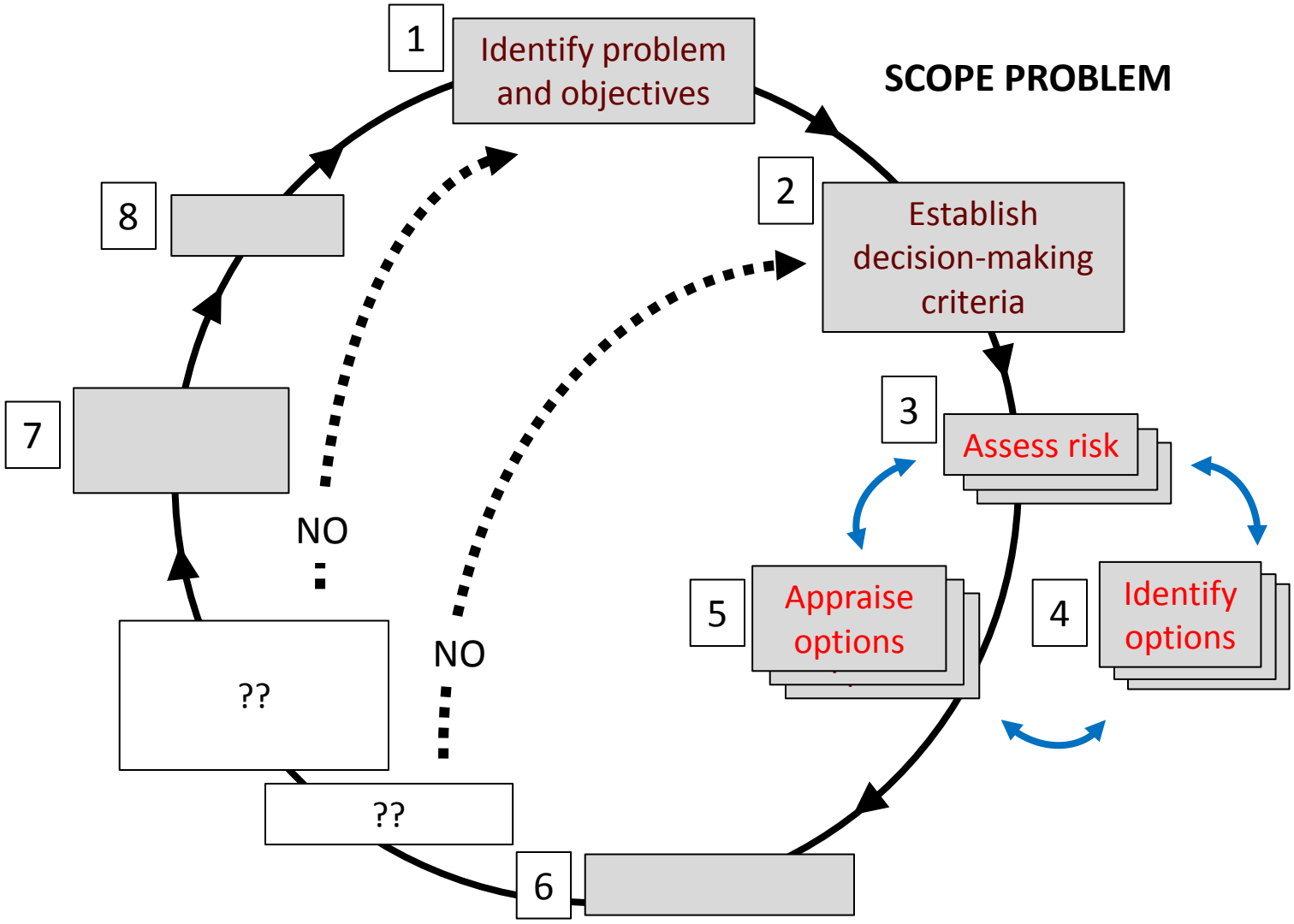
Discussion Topics

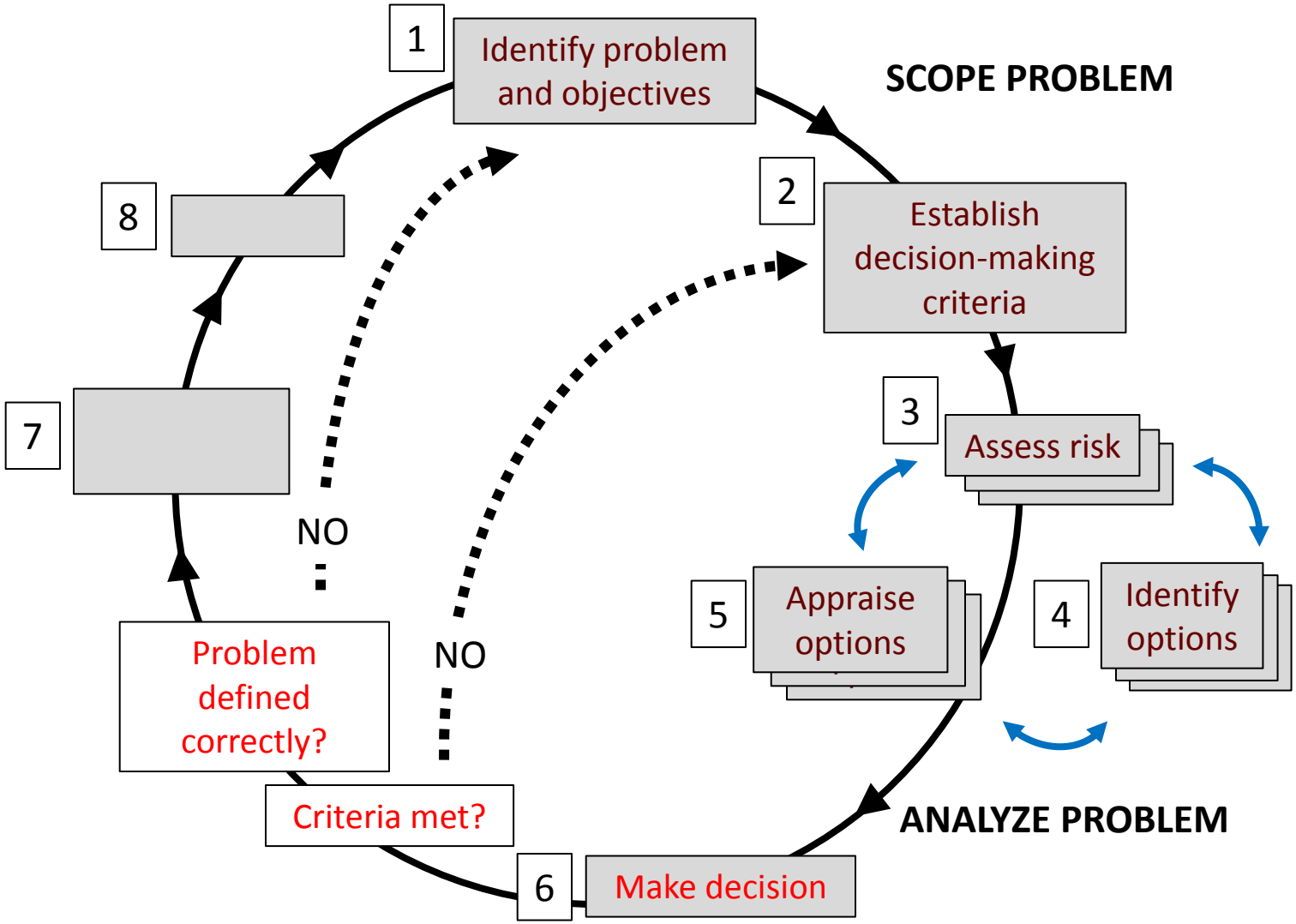


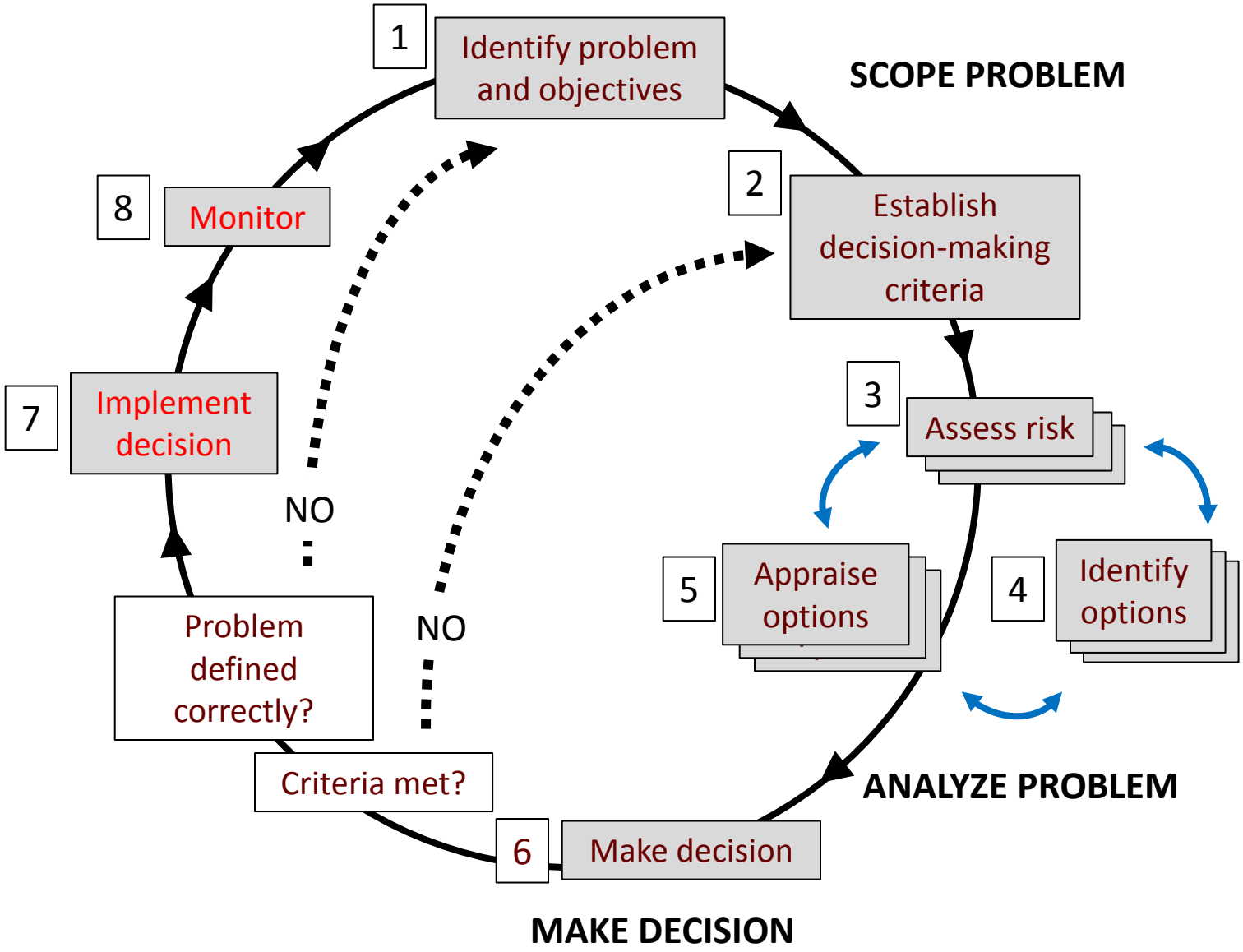
“Iterative Risk Management”


1
2
3
4
5
6
7
8
NO
NO
??
??


1
Identify problem and objectives
2
Establish decision-making criteria
3
4
5
6
??
7
8
NO
NO
??


1
Identify problem and objectives
SCOPE PROBLEM
2
Establish decision-making criteria
3
Assess risk
4
Identify options
5
Appraise options
6
7
??
??
8
NO
NO


1
Identify problem and objectives
SCOPE PROBLEM
2
Establish decision-making criteria
3
Assess risk
4
Identify options
5
Appraise options
ANALYZE PROBLEM
6
Make decision
Criteria met?
NO
Problem defined correctly?
NO
7
8


1
Identify problem and objectives
SCOPE PROBLEM
2
Establish decision-making criteria
3
Assess risk
4
Identify options
5
Appraise options
ANALYZE PROBLEM
6
Make decision
MAKE DECISION
Criteria met?
NO
Problem defined correctly?
NO
7
Implement decision
8
Monitor

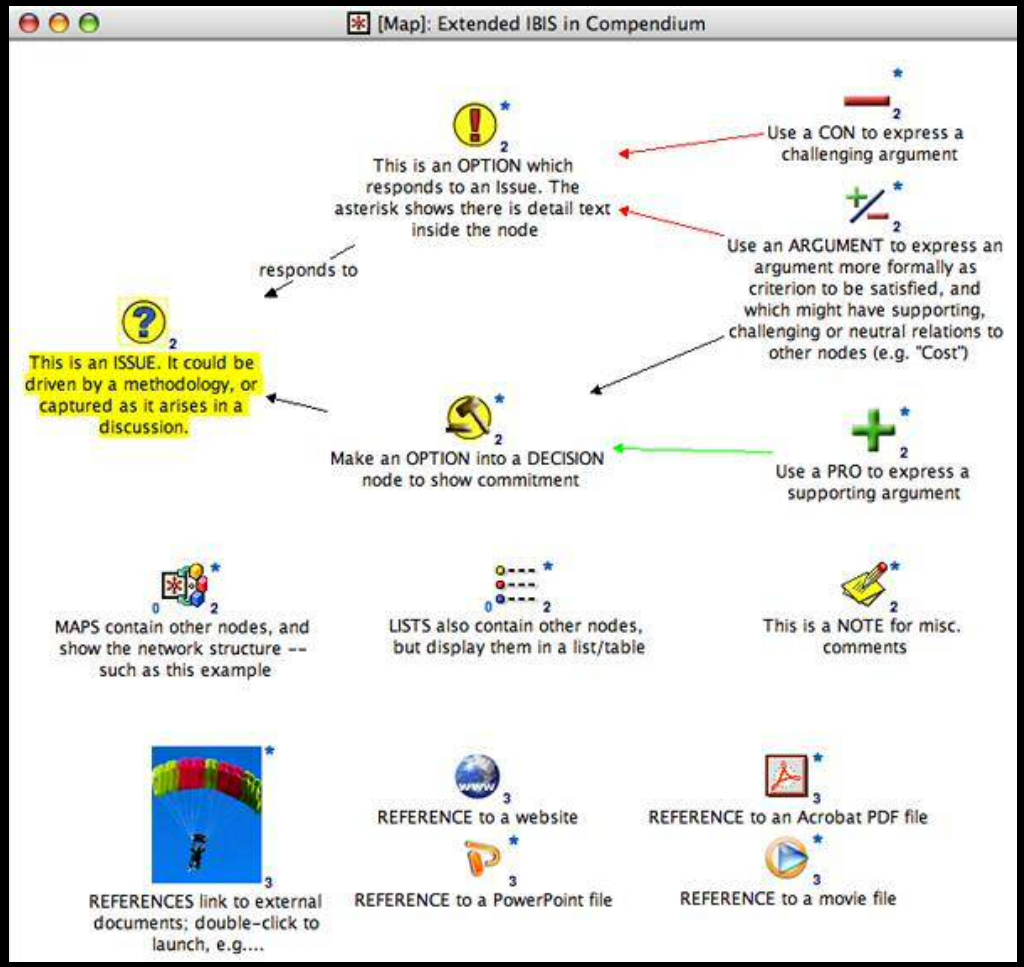
SCOPE PROBLEM

Stage 1. Identify problem and objectives

Stage 2. Establish decision-making criteria

Tool Example: **COMPENDIUM**

"The software provides a visual environment that allows people to structure and record collaboration as they work through *wicked problems*."



ANALYZE PROBLEM

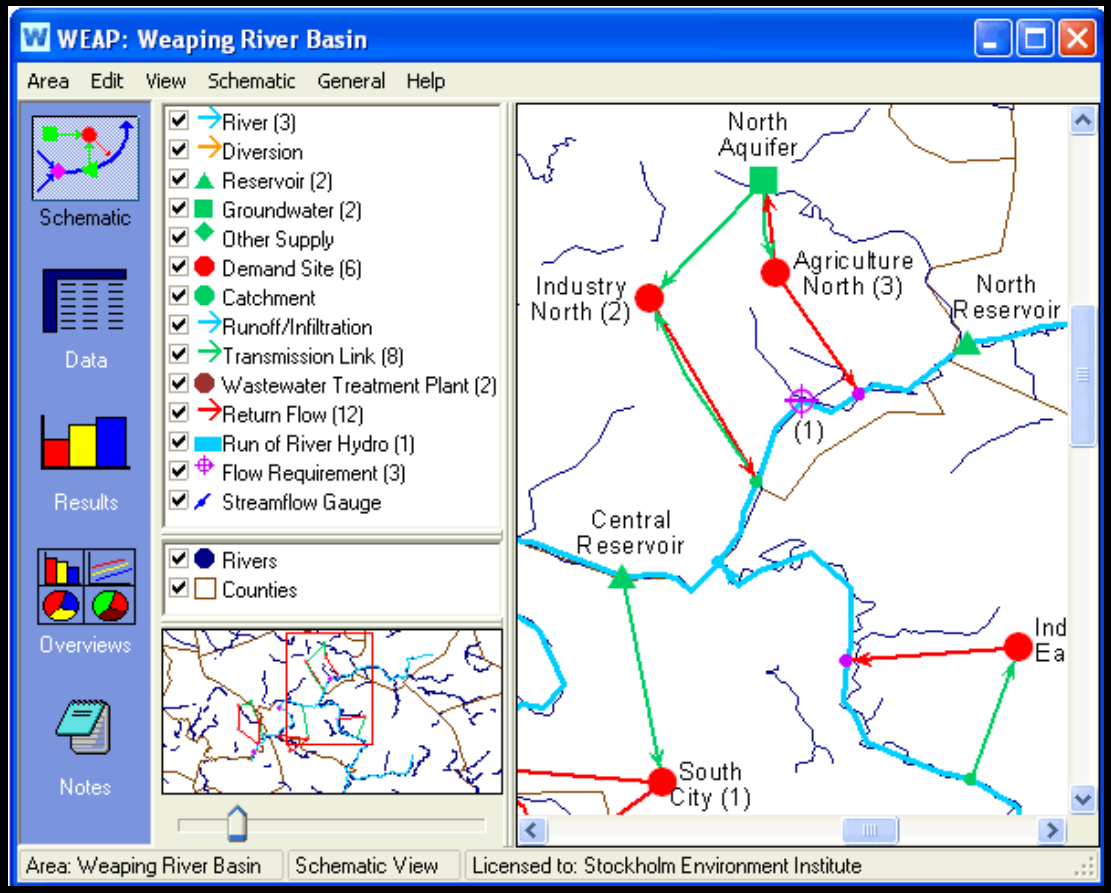
Stage 3 (i,ii,iii). Assess risk

Stage 4 (i,ii,iii). Identify options

Stage 5 (i,ii,iii). Appraise options

Tool Example: **WEAP**
(Water Evaluation and Planning)

"WEAP is … used to create simulations of water demand, supply, instream flow requirements, water quality, etc., all under scenarios of varying policy, hydrology, climate, land use, technology and socio-economic factors"



MAKE DECISION

Stage 6. Make decision

Tool Example: **SENSITIVITY ANALYSIS**

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Sensitivity analysis

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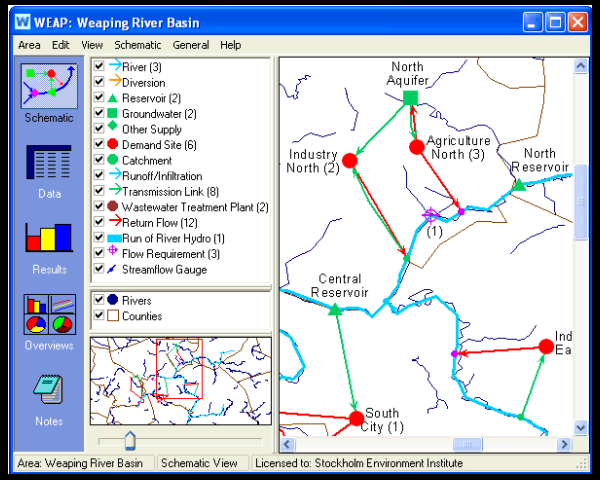
Sensitivity analysis (SA) is the study of how the variation (uncertainty) in the output of a mathematical model can be apportioned, qualitatively or quantitatively, to different sources of variation in the input of the model. [1]. Put another way, it is a technique for systematically changing parameters in a model to determine the effects of such changes. Sensitive analysis in finance is the part of capital budgeting decisions.Suppose, if our investment budget increases 20% due to unknown factors, we see in sensitive analysis, what will be its affect on our NPV.[2]

In more general terms uncertainty and sensitivity analysis investigate the robustness of a study when the study includes some form of mathematical modelling. Sensitivity analysis can be useful to computer modellers for a range of purposes[3], including:



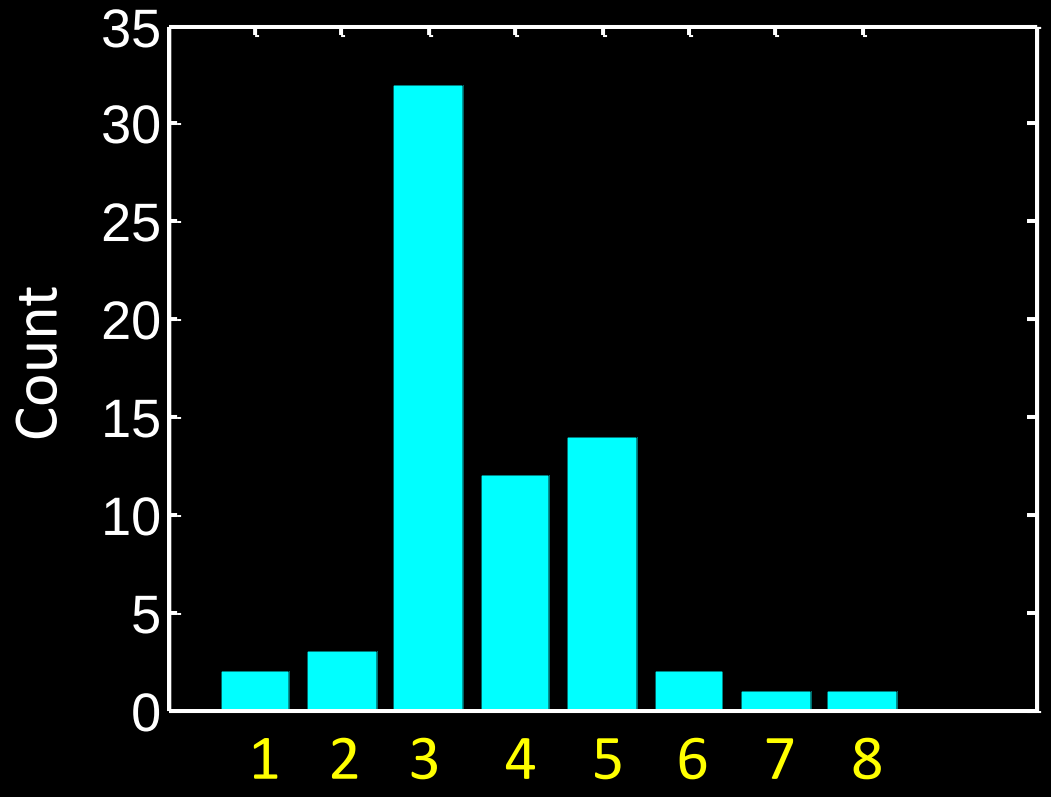
POST-DECISION

Stage 7. Implement decision

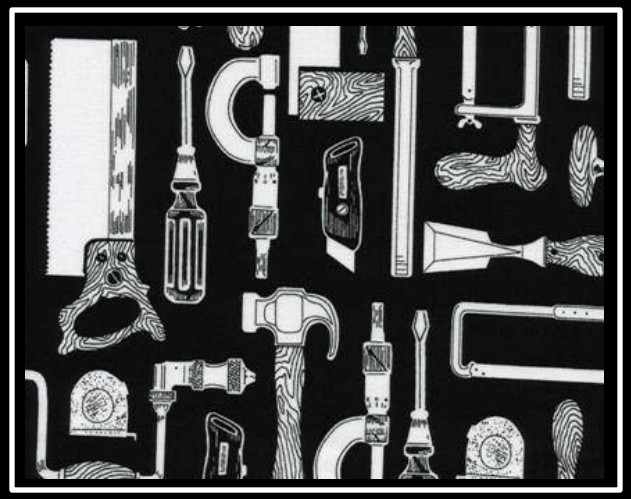
Stage 8. Monitor

Tool Example: **MODIS DATA**

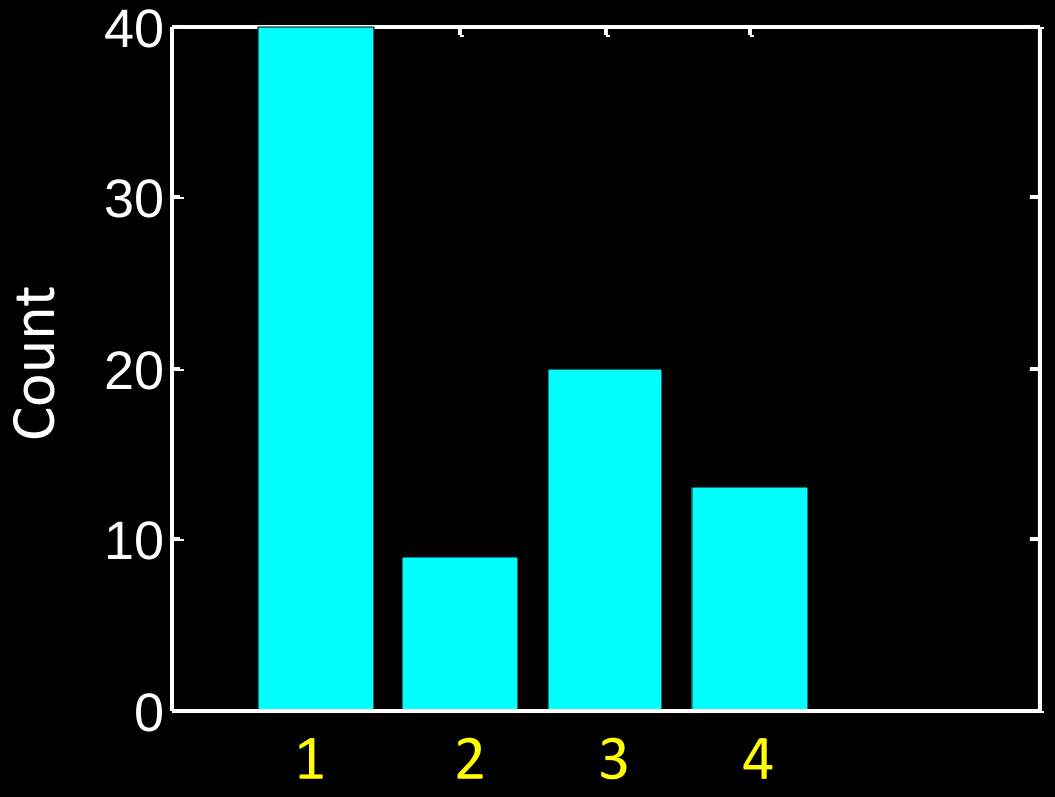
Tool s by STAGE



1&2	Problem scoping
3,4&5	Analyze problem
6	Make decision
7&8	Post-decision

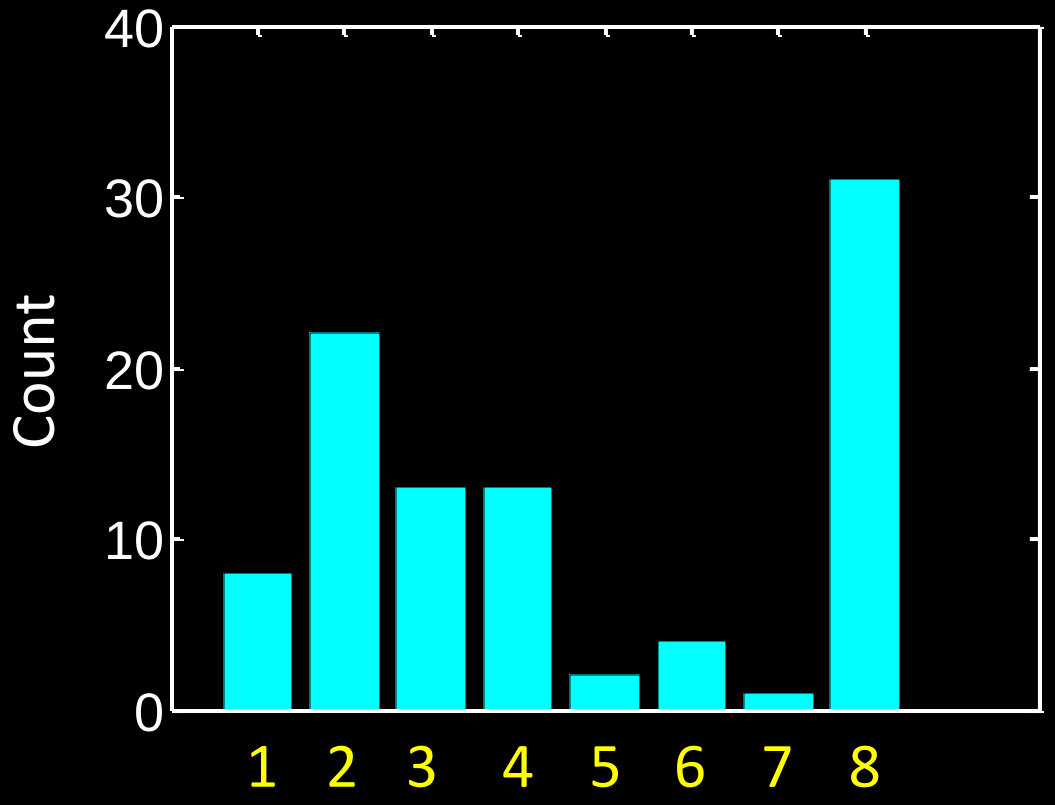


Tool s by TYPE



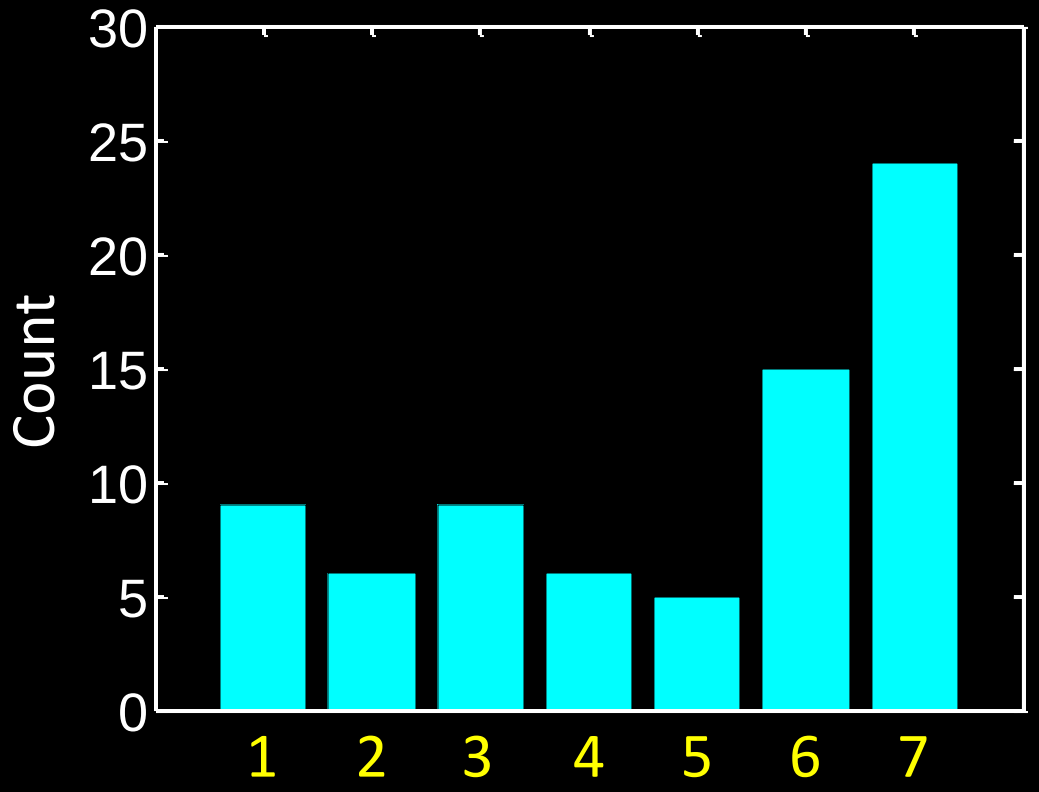
1. Data
2. Information
3. Guide
4. Online Courses

Tool s by SECTOR



1. Groundwater
2. Surface water
3. Water quality
4. Water supply
5. Energy
6. Finance
7. Policy
8. General

Tool s by KEYWORD



1. Basic Climate Science
2. Downscaling
3. Vulnerability
4. Scenario building
5. Non-stationarity
6. Adaptation
7. Other

Tool Evaluation I: Data Tools

1. Relevance
2. Legitimacy & Credibility
3. Usability
4. Connection & Communication

Tool Evaluation II: Training

1. Scientific accuracy
2. Teaching effectiveness
3. Ease of use and technical quality


Next Steps?

Thanks!