### Review on methodical performances in Lower Saxony

Recommandations from CIS documents: CBA, MCA, CEA etc.

<table>
<thead>
<tr>
<th>Method</th>
<th>Subject matter/objective</th>
<th>Duration</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEA (cost-effectiveness-analysis)</td>
<td>Measures for passability and hydromorphological measure in two local communities/ cost-effectiveness</td>
<td>Approx. 8 months</td>
<td>25,000€ (not including internal costs)</td>
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<tr>
<td>MCA (multi-criteria-analysis)</td>
<td>Alternative measures for a length of 13km/ disproportionate costs</td>
<td>4 months</td>
<td>None, but equivalent to approx. 20,000€</td>
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<tr>
<td>MCA (multi-criteria-analysis)</td>
<td>Ranking of groups of measures/ decision support</td>
<td>4 months</td>
<td>50,000€</td>
</tr>
<tr>
<td>Ecosystemservices approach</td>
<td>Accompany of identification of measures and cost-benefit-analysis (international border)/ decision support and identification of possible benefit-transfers</td>
<td>Ongoing for over 2 years now</td>
<td>So far over 100,000€</td>
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</tbody>
</table>

Note: there were existing feasibility studies for the considered areas, so most data was already available at the start of the project.
General results and experiences

• Only little and normally well known and discussed problems occur when applying the suggested methods like MCA, CBA, CEA or others

→ No problem with instruments!

• Application of methods basically only come in geographically, objectively and temporally restricted forms

→ Water management under WFD requires an ongoing, comprehensive and state-wide perspective on the problems

• So far the fulfillment of economic requirements was handled rather „end-of-pipe“: Practical experience shows that if major decisions in the water management planning process are avoided first, economics is expected to provide the answers

→ This is not the intention of the requirements in the Directive nor can economics help very much this way, with the suggested methods the economic discipline stays behind its possibilities

• Only a few economists work in the water management authorities so authorities have to rely on scientients

→ Scientists again can only gain little insight of the challenges of practical water management
Conclusions and the need for new approaches

Why do we need new approaches:
• experience show the strength of the proposed methods, but also the limitations when it comes to practical water management challenges.
• time-consuming and cost-intensive for bottom up processes with very limited additional information
→ so far economics did not fullfil its task to support the achievement of the Directive's objectives in an efficient way!

What are the needs:
• focus on practical needs: what are the problems, where can economics help and how?
• consideration of water management procedures and structures → therefore maybe new approaches and methods? Example I-Five

First ideas:
• further integration of economics into the planning process?
• not only customizable but also standardizable economic based systems for decision support?
• look into other economic disciplines, e.g. organisational efficiency, adapted controlling of public authorities (water management administration)