Low water monitoring in the Rhine River Basin

European River Symposium 2021
Session 2: Adaptation to climate change:
the interest of basin management planning

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The Rhine – a European river

200,000 km²
One river basin – nine countries
The Rhine and its challenges

Düsseldorf in February 2021

Near Koblenz in October 2018

Koblenz in June 2013
Success & objectives

140 km² of floodplains have been reactivated

Restore another 200 km² of floodplains by 2040
Success & objectives

Reconnect another 100 oxbow lakes by 2040
## Low water monitoring

Coordinated with **ICPMS** and **IMC**

<table>
<thead>
<tr>
<th>Colour</th>
<th>Class</th>
<th>Severity</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>green</td>
<td>0</td>
<td>$\geq \text{NM7Q(T2)}$</td>
<td>normal = no LW</td>
</tr>
<tr>
<td>yellow</td>
<td>1</td>
<td>$&lt; \text{NM7Q(T2)}$</td>
<td>frequent LW</td>
</tr>
<tr>
<td>orange</td>
<td>2</td>
<td>$&lt; \text{NM7Q(T5)}$</td>
<td>less frequent LW</td>
</tr>
<tr>
<td>red</td>
<td>3</td>
<td>$&lt; \text{NM7Q(T10)}$</td>
<td>rare LW</td>
</tr>
<tr>
<td>purple</td>
<td>4</td>
<td>$&lt; \text{NM7Q(T20)}$</td>
<td>very rare LW</td>
</tr>
<tr>
<td>black</td>
<td>5</td>
<td>$&lt; \text{NM7Q(T50)}$</td>
<td>extremely rare LW</td>
</tr>
</tbody>
</table>
Low water monitoring

European Drought Observatory

https://edo.jrc.ec.europa.eu

www.iksr.org/en/topics/low-water/low-water-monitoring
“Rhine 2040” – a new programme for new challenges

Objectives and measures:

• Climate change adaptation
• Biodiversity
• Water quality
• Flood risk management
• Low water management
Thanks for your attention!

European Riverprize 2013, Vienna (Austria) & International Riverprize 2014, Canberra (Australia)

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