# Developing policy and planning of river continuity restoration in greater Europe

May 27 2021, Sharelle Verheij (ECRR)


The network for best practices of river restoration in Greater Europe
ECRR
European Centre for River Restoration

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# Programme

The network for best practices of river restoration in Greater Europe
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# Background information

- River barriers


- Barrier prioritization

# Background information

Data collection

- ECRR Network / Ministries

Survey set up

- 3 blocks

# 29 participating countries

The network for best practices of river restoration in Greater Europe
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# Results: Block 1

Recognition of river continuity in current national policies

# Results

The network for best practices of river restoration in Greater Europe
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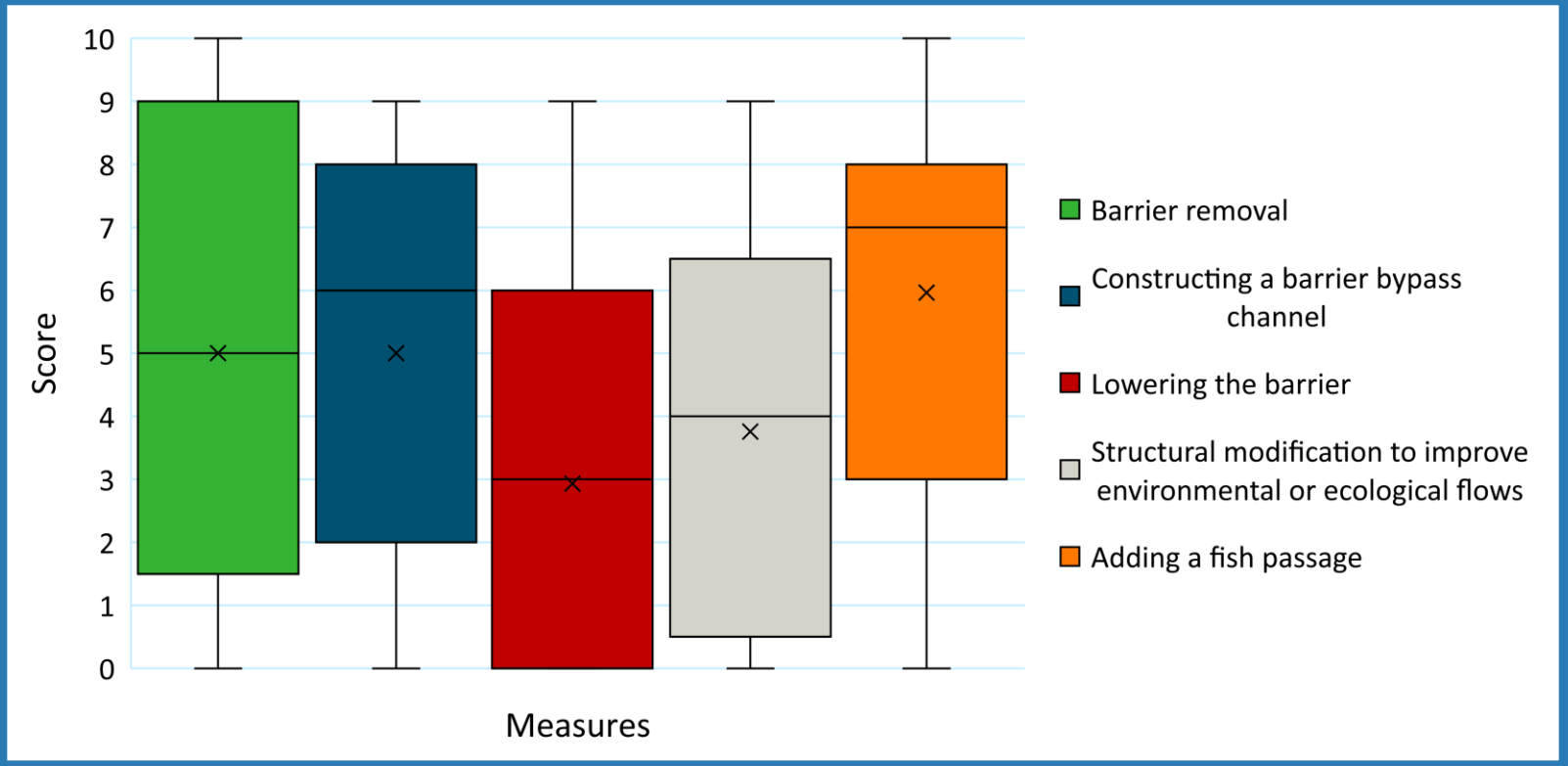
## Which measures are applied to restore river continuity?

Scale: 0 (not considered) to 10 (highest priority)

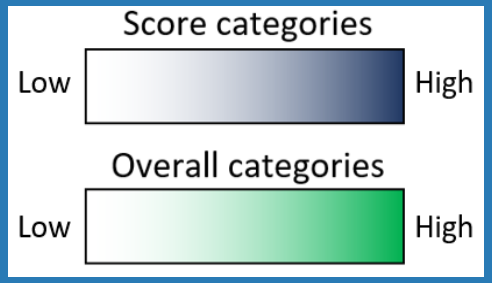


# Results

Which measures are applied to restore river continuity?

| | Adding a fish passage | Constructing a barrier bypass channel | Barrier removal | Structural modification to improve environmental or ecological flows | Lowering the barrier | Overall |
|---|---|---|---|---|---|---|
| Wales (UK) | | | | | | |
| Poland | | | | | | |
| Scotland (UK) | | | | | | |
| Spain | | | | | | |
| Ireland | | | | | | |
| Estonia | | | | | | |
| France | | | | | | |
| Finland | | | | | | |
| England (UK) | | | | | | |
| Denmark | | | | | | |
| Cyprus | | | | | | |
| Sweden | | | | | | |
| Germany | | | | | | |
| Austria | | | | | | |
| Portugal | | | | | | |
| Lithuania | | | | | | |
| Northern Ireland (UK) | | | | | | |
| Republic of North Macedonia | | | | | | |
| Romania | | | | | | |
| Switzerland | | | | | | |
| Slovakia | | | | | | |
| Netherlands | | | | | | |
| Norway | | | | | | |
| Hungary | | | | | | |
| Latvia | | | | | | |
| Bosnia and Herzegovina | | | | | | |
| Russia | | | | | | |
| Malta | | | | | | |
| *Overall* | | | | | | |

Legend:




Result 1 (2/2)

Recognition | Potential | Observations

# Results

Barriers prioritized for measures to improve the river continuity

1. Largest environmental/ecological impact
2. Easy to implement measures
3. Lacking (operative) fish passage
4. Obsolete
5. Relatively small
6. High dams

# Results

River continuity restoration conflicted by barrier functions

1. Renewable energy (hydropower)
2. Flood protection
3. Water storage for agriculture
4. Cultural heritage
5. Water storage for drinking water
6. Recreation
7. Inland navigation

# Results

Stakeholder groups influencing river continuity policies

1. Industries (e.g. energy sector)
2. NGOs
3. Public sector
4. Fishery organisations
5. Recreational sector/angling
6. Landowners

# Conclusions: Block 1

Recognition of river continuity in current national policies

*Measures:* *(1) Fish passage*
*(2) Bypass channel / removal*
*Barrier type:* *Largest environmental impact*
*Conflicting function:* *Renewable energy (hydropower)*
*Influential stakeholders:* *Industries, NGOs, public sector*

# Results: Block 2

The potential of river continuity restoration

# Results

Total number of articial barriers

**680,227**

- **46%** can be adjusted to include a fish passage
- **20%** is obsolete
- **1%** barrier removals have taken place

Result 5

Recognition > Potential > Observations

# Conclusion: Block 2

The potential of river continuity restoration

*Great potential and opportunities*

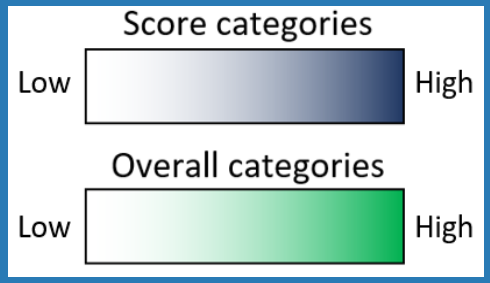
# Results: Block 3

Observations/opinions on the importance of / opposition to river continuity restoration

# Results

To what extent are the following actions used to improve the quantity and/or quality of river continuity restoration?

Legend:




| | Complementing/ improving currently available information/ knowledge | Legal enforcement and regulations | Financial support for projects and/or the barrier owners | Development of (best) practices | Optimizing already existing continuity measures | Better integration of policies and directives | Increasing political attention | Raising public awareness on the issue | Overall |
|---|---|---|---|---|---|---|---|---|---|
| Austria | | | | | | | | | |
| Republic of North Macedonia | | | | | | | | | |
| Wales (UK) | | | | | | | | | |
| Slovakia | | | | | | | | | |
| France | | | | | | | | | |
| Denmark | | | | | | | | | |
| Netherlands | | | | | | | | | |
| Finland | | | | | | | | | |
| Romania | | | | | | | | | |
| England (UK) | | | | | | | | | |
| Scotland (UK) | | | | | | | | | |
| Spain | | | | | | | | | |
| Lithuania | | | | | | | | | |
| Germany | | | | | | | | | |
| Switzerland | | | | | | | | | |
| Portugal | | | | | | | | | |
| Estonia | | | | | | | | | |
| Sweden | | | | | | | | | |
| Northern Ireland (UK) | | | | | | | | | |
| Poland | | | | | | | | | |
| Norway | | | | | | | | | |
| Russia | | | | | | | | | |
| Ireland | | | | | | | | | |
| Croatia | | | | | | | | | |
| Cyprus | | | | | | | | | |
| Hungary | | | | | | | | | |
| Malta | | | | | | | | | |
| Bosnia and Herzegovina | | | | | | | | | |
| Latvia | | | | | | | | | |
| *Overall* | | | | | | | | | |

# Results

Ways to improve communication of policies towards the public

1. Awareness raising
2. Public participation
3. Demonstration of best practices
4. Citizen science
5. Promotion
6. Advertising

# Conclusion: Block 3

Observations/opinions on the importance of / opposition to river continuity restoration

*Awareness raising is most effective, but not yet put into practice to its full potential.*

# Recommendations

3 target audiences:

- Policymakers & planners
- Implementers
- Researchers

# Recommendations:
## Policymakers & planners

- Improve/develop framework regarding strategies, policies & planning
- Investigate policies, planning, prioritisation, guidance, instruments & tools

# Recommendations: Implementers

- Use drivers & strategies
- Increase awareness raising
- Involve stakeholders
- Showcase best practices

# Recommendations: Researchers

- Improve/expand/verify knowledge, methodologies & techniques
- Test/verify long term outcomes
- Integrate science
- Monitor baseline & changes
- Learn from implementation
- Provide evidence

# Recommendations: Overall

- National policy
- Prioritisation strategy for removals
- Measures prioritisation
- National database of barriers
- Implementation programmes

# Publication & newsletter

www.ecrr.org