



**12<sup>th</sup> REGIONAL  
STAKEHOLDER FORUM**

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# Grey and green nature-based solutions that can address impacts on aquatic biodiversity caused by other water users' management actions

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# Fisheries in floodplain water bodies and rice systems are important for food and nutrition



Fishery dependent livelihoods should not just be collateral damage from management water for the many, the health and function of the Mekong have intrinsic value that must be recognized

Floods, flooding, irrigation and drainage are increasingly part of floodplain developments, and can be major disruptors.

We need to build in fisheries opportunities



# Mitigation of grey structure works at different scales



Local level modifications improve lateral connectivity, restoring natural hydrology and function - reconnecting wetlands, water bodies and refuge areas



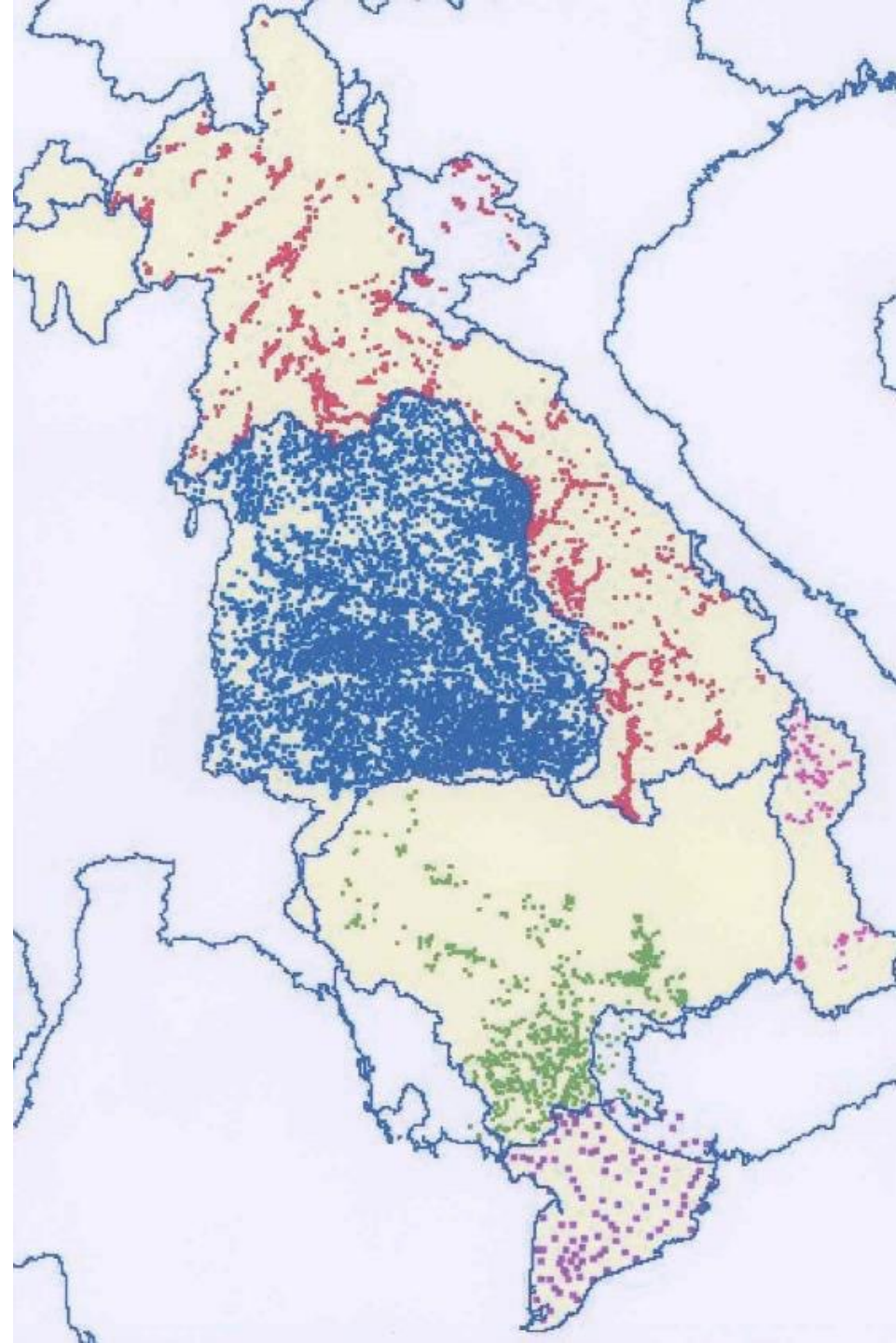
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# Major watershed and large basin level

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At a higher level there are more significant efforts to address bottlenecks caused by large structures

Addressing bigger regulators, dealing with floodplain fragmentation and importantly, environmental flows



**Reconnection and flow restoration should also be accompanied by habitat restoration and refuge creation that benefits from the restored hydrology.**

**This may involve stock enhancement**



# Lessons from large rivers

- In other large (tropical) rivers, fisheries have been lost with little prospect of recovery
  - Farruka barrage: loss of major migrations of anadromous species
  - Senegal river loss of flow: fishery productivity more than halved
- Some mitigation efforts applied
  - fish ladders, seasonal flow release
- These fisheries were less important and smaller than the Mekong
- We must ensure that it is NOT inevitable that the Mekong will go the same way with current water development planning and policy.



# Cooperation

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Although action at local level can make local improvements, addressing local bottlenecks, there also needs to be a much higher level strategy across sub basins and the Mekong basin itself if there is going to be significant impact.

That requires the sort of coordination and longer term vision for which the MRC can provide leadership







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***THANK YOU***