Decline of gravel banks and related species (*Myricaria*) due to river degradation



WWF Dam removal goes Alps, 06.05.2021

Rio Murta (Chile)

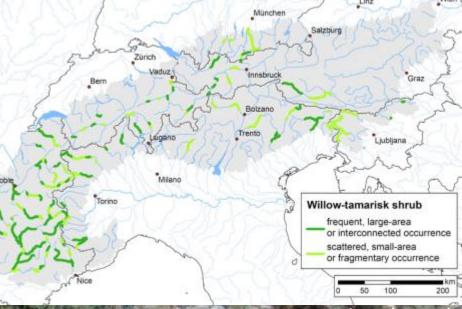
extensive gravel areas & high morpho- and hydrodynamics: Braided rivers

Susitna River (Alaska, USA)

Characteristic ecosystems of the Alps: habitats are characterized by stresses such as flooding, disturbance and drought

Lech (Austria)

"hot spot" of a specific flora and fauna e.g. Myricaria germanica



Process of degradation -Is it possible to reverse this process?

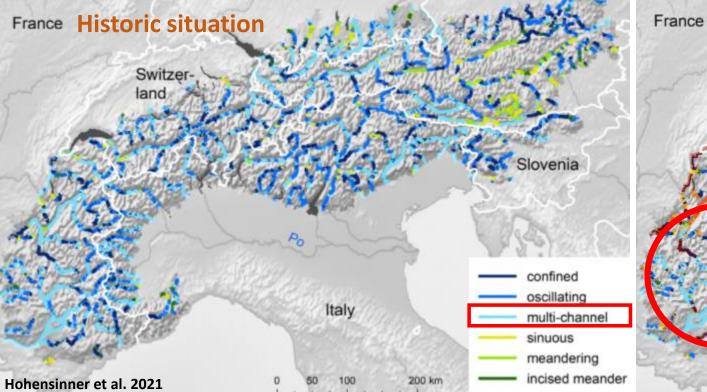
How late is it?

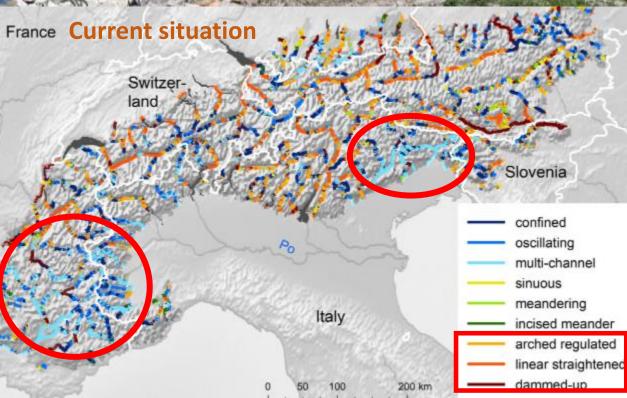




The causes can be summarized in four factors:

1) Quantitative extinction of riparian habitats





Jpper Rhine (Germany)

2) Degradation of remaining riparian habitats

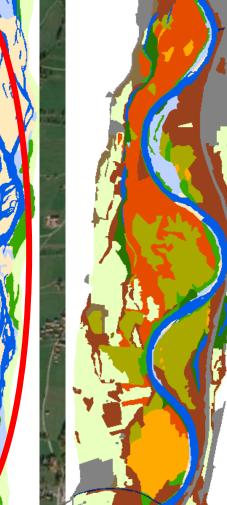
2466 m

Google Earth

Upper Isar (Germany)

3) Fragmentation and below minimum habitat sizes





2015

10 Upper Isar (Germany)

4) Reintroduction succeeds in very few cases









Back to the future?

"Klondike" (Yukon River, Whitehouse (Canada)

"big solutions" can at least lead to a trend reversal.



SAVAGE RIVER ELEVATION 2780'