

**Transboundary water cooperation
in the EU:
an assessment of hydropolitical
vulnerability**

Gábor Baranyai

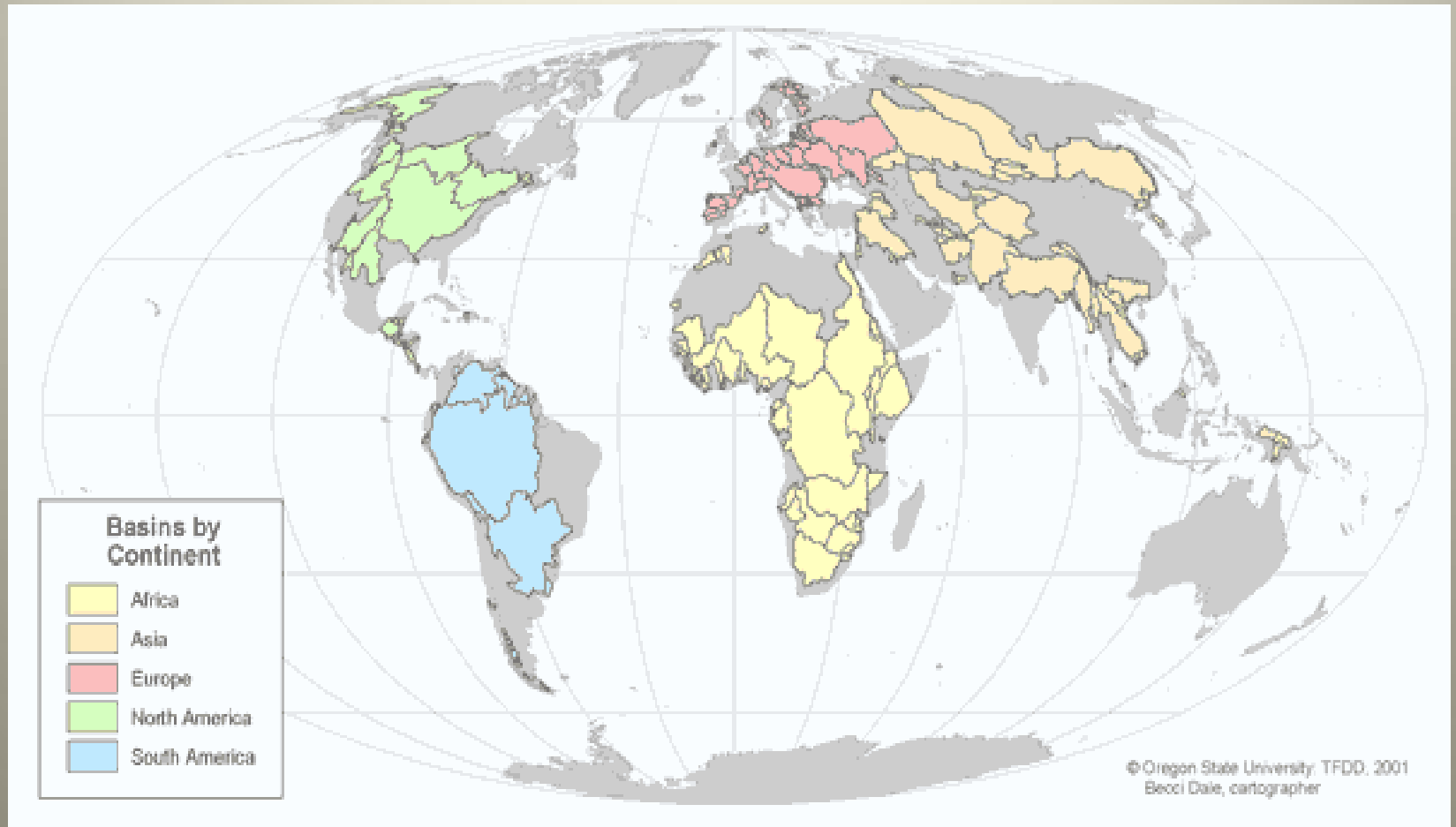
The need for review I

- Stationarity is dead: past data to model hydrological conditions questioned
- Main impacts of the anthropocene
 - Demography, urbanisation, changing consumer habits
 - Climate change
- In Europe: main driver is land uses changes + climate change
- Most impacts of climate change will be manifested through **changes in river flow**

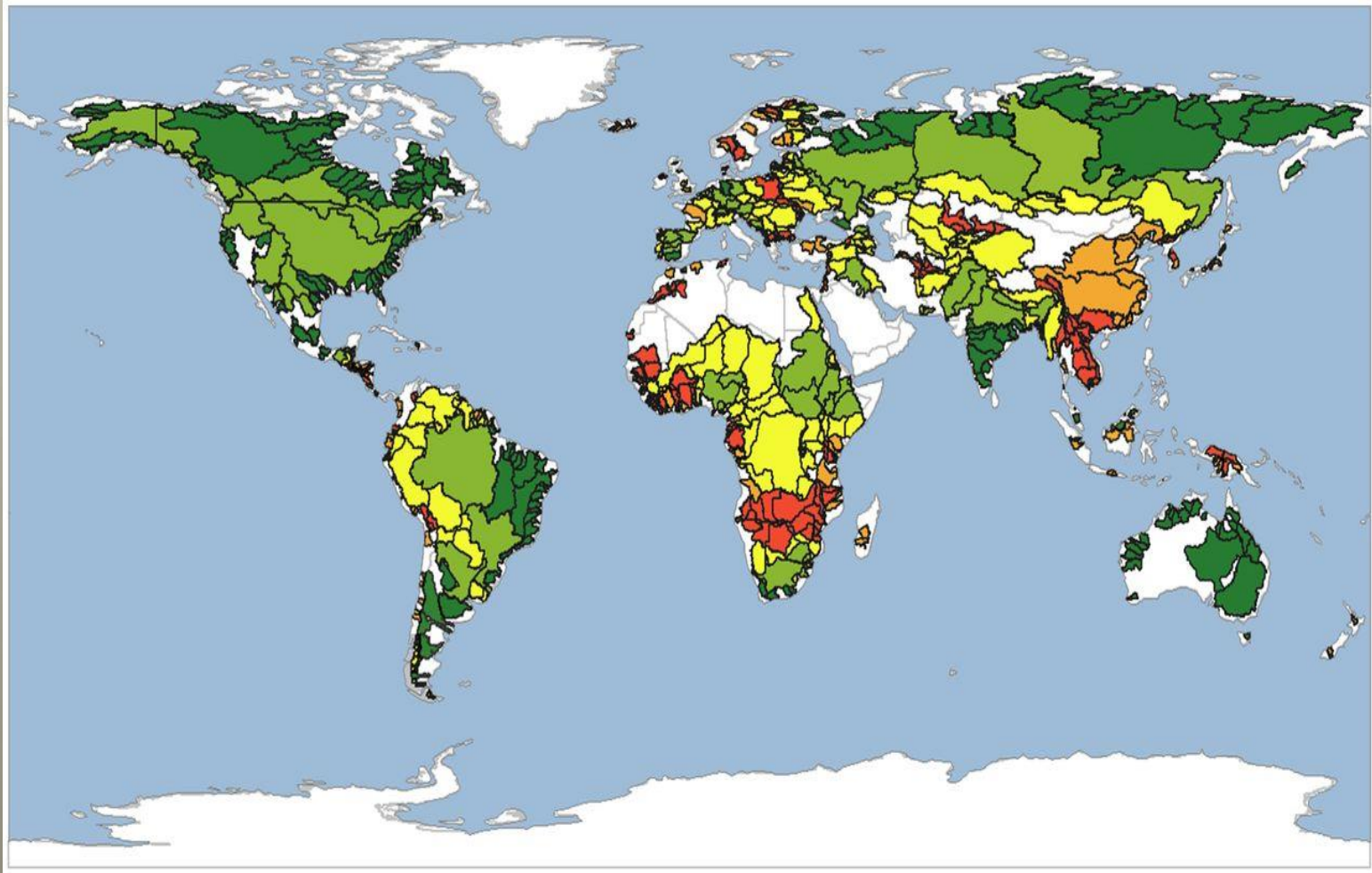
The need for review II

- The problem of transboundary rivers
 - “[o]f the elements that make for political controversy in human affairs, the control of water is one of the most persistent... The last community to get the water is always suspicious of the intentions of those upstream” – structural asymmetry
 - One of the most difficult issues of international relations

International river basins in the world

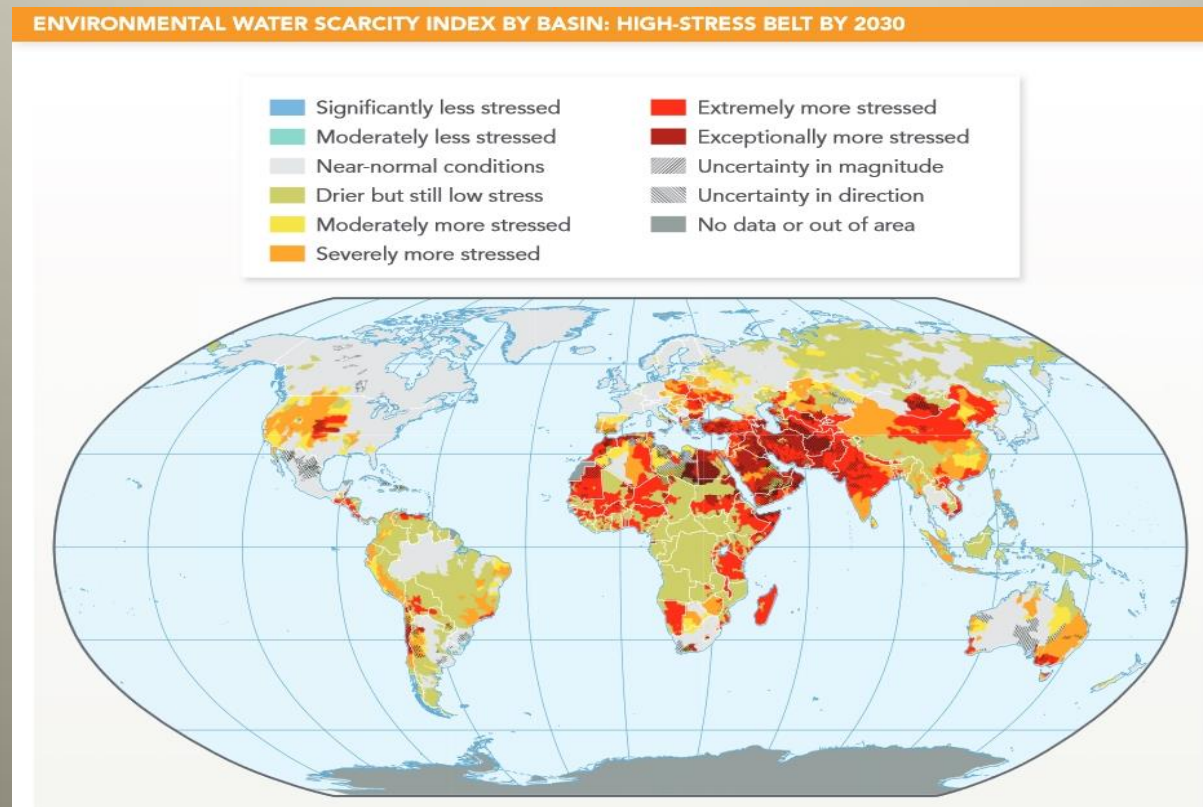


Shared federal river basins



Impacts on the hydropolitical balance

US National Intelligence Council (2012): Global Trends 2030: Alternative Worlds)“water may become a more significant source of contention than energy or minerals out to 2030 at both the intrastate and interstate levels”



The situation in the EU

- Mapping of hydropolitical resilience (UNEP, World Bank, OSU)
- Factors of stability or resilience
 - presence of a *water treaty*
 - mechanisms for *water allocation*
 - mechanisms for *variability management*
 - *conflict resolution mechanisms*
 - presence of a *river basin organisation* (RBO)

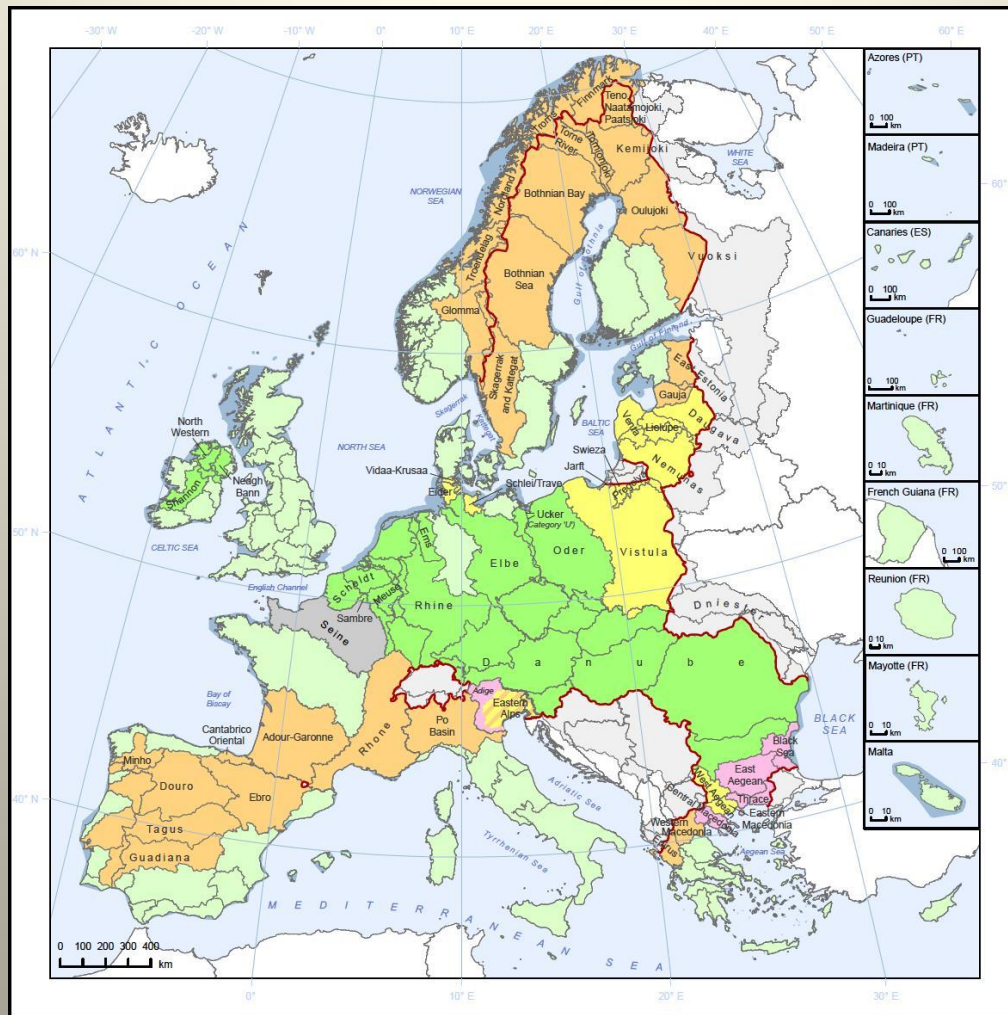
- The European continent has the highest number of international river basins
- Scores best in terms of basic resilience

Individual treaty and RBO components	Basin continent				
	Africa	Asia	Europe	N. America	S. America
At least one water treaty	50	40	69	64	32
Allocation	25	25	33	42	14
Variability mgmt.	20	18	34	15	6
Conflict resolution	35	25	49	44	15
At least one RBO	40	19	32	56	22

- But major risks long term
 - one third of the *European population* lives in basins whose treaties are of very basic content
 - significant vulnerabilities for Europe by 2050,
 - major climate change impacts
 - the lack of institutional framework.
 - mainly situated in central and eastern Europe, i.e. at least partly within the boundaries of the European Union

An assessment of hydropolitical vulnerability in the EU

- Starting point:
 - EEA (2012):
 - Most important impact of climate change on water: availability
 - Water stress is projected to worsen in the absence of sustainable approaches to the management of Europe's water resources
 - EU water policy and legislation:
 - Completely ignores water quantity
 - Weak in conflict resolution



EU River Basin Districts indicating transboundary co-operation

- | | |
|--|---|
| Category 1: Co-operation agreement, co-operation body and international RBMP in place | National River Basin Districts (within the EU) |
| Category 2: Co-operation agreement and co-operation body in place, but no international RBMP in place | International River Basin Districts (outside the EU) |
| Category 3: Co-operation agreement in place but no co-operation body or international RBMP in place | Coastal waters |
| Category 2/3: Not clear whether both co-operation agreement and co-operation body in place | Country borders |
| Category 4: No co-operation formalised | EU27 extent |
| Uncategorised | |

Map produced by WRC plc on behalf of the European Commission[©], DG Environment, 2012

- EU secondary legislation:

Subject	year	Quantity	Env. quality	risk mgmt	variability	infra	inst	dispute
WFD	2000	no	yes	yes	no (but planning)	yes	yes	yes (Art 12)
Floods	2007	no	no	yes	yes?	no	-	-
UWWT	1991	no	yes	no	no	no	-	-
Priority substance	2008	no	yes	no	no	no	-	-
Other (EIA, IPPC, liability)		yes	-	-	-	yes	-	-

- EU primary legislation:

- water quantity mgmt (TFEU 192.2b) impossible
- dispute settlement impossible

Conclusions:

- EU water law scores
 - outstandingly in terms of
 - overall policy framework
 - pollution control
 - planning cooperation
 - poorly in terms of
 - water quantity mgmt
 - variability mgmt
 - dispute settlement
- Completely opposite trend of int'l treaty evolution:
 - quantity mgmt first
 - comprehensive framework later

